REPORT OF
COOPERATIVE BLISTER RUST CONTROL WORK
IN NORTHEASTERN STATES
DURING 1925

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OUTLINE AND INDEX FOR ANNUAL REPORT OF COOPERATIVE BLISTER RUST CONTROL WORK IN NORTHEASTERN STATES DURING 1925

Foreword

The facts given in this report were obtained from the 1925 BRE3a and BR4F forms, and the state annual reports submitted by the state leaders, also from personal observations made by the federal supervisor.

The writer wishes to acknowledge the capable assistance of Mr. K. K. Stimson in the summarization of the statistics given in this report, and for his painstaking efforts in typing same.

E. C. Filler

BLISTER RUST CONTROL IN THE NORTHEASTERN STATES

The results accomplished in blister rust control, since the eight year program was initiated in June, 1922 have proved the practicability of the present policy. During the period 1922-1925, a total of 3,211,730 acres, in New England and New York, have been cleared of 29,787,121 wild and cultivated Ribes at a per acre cost of 17.5 cents. This acreage is over three times as much area as covered during the four year period prior to 1922. In the application of control measures, 12,437 individuals have expended $152,900.45 and $146,213.89 has been spent from 460 town appropriations made in four states. Several thousand additional persons have cooperated by giving moral support, or allowing their cultivated bushes to be destroyed without compensation. The following three tables give a general summary of the cooperative work during the years 1922-1925.

SUMMARY OF EDUCATIONAL AND SERVICE WORK PERFORMED BY BLISTER RUST CONTROL AGENTS IN THE NORTHEASTERN STATES DURING THE PERIOD JULY 1, 1922 to DECEMBER 31, 1925.

EDUCATION

	July-Dec. 1922	1923	1924	1925	Totals
Meetings addressed	251	722	707	627	2307
Attendance	29,163	32,649	47,071	45,522	154,405
Field Dem. meetings	335	834	792	418	2379
Attendance	1732	6442	4050	2912	15,136
Exhibits placed	374	582	647	680	2283
Publications distributed	35,067	51,308	55,696	68,818	210,889
Items published	313	1203	1269	1294	4079
Posters & signs placed	2500 (Est.)	6499	13,868*	8894	31,761

SERVICE

Initial interviews	6227	14,724	15,984	13,819	50,754
Follow-up calls	1924	5555	6804	7360	21,663
Individuals instructed in Disease and Damage	1027	2688	3922	6833	14,470
Individuals instructed in Control Methods	513	1586	2276	4336	8711

*Includes 4315 posters mailed by the Boston Office to post offices and railroad stations in the agent districts of New England.

TOWN AND INDIVIDUAL COOPERATION IN RIBES ERADICATION WORK

1922 - 1925

Year	TOWN COOPERATION			INDIVIDUAL COOPERATION		
	No. Towns Appropriating	Amount Appropriated	Amount Expended	No. Individuals Cooperating: Cult. Ribes Erad. Only	No. Individuals Cooperating: Wild & Cult. Ribes Erad.	Amount Spent by Individuals
1922	59	$19,827.86	$17,700.33	-	971	$26,512.49
1923	122	36,380.00	40,140.11*	698	1968	40,969.47
1924	147	47,352.81	48,022.14*	1714	3059	45,698.43
1925	132	40,989.90	40,351.31	958	3069	39,720.06
TOTALS	460	144,550.57	146,213.89	3370	9067	152,900.45

*Balance of town funds from previous years were also expended during this year.

SUMMARY OF RIBES ERADICATION IN NORTHEASTERN STATES

1922 - 1925

Year	No. Acres Eradicated	Ribes Pulled: Wild	Ribes Pulled: Cult.	Total Cost	Per Acre Values: Ribes	Per Acre Values: Cost
1922	476,621	4,849,812	16,061	$96,818.37	10.7	.20
1923	892,639	7,969,917	55,074	160,883.87	9.0	.181
1924	1,008,042	9,466,271	73,858	169,175.52	9.4	.167
1925	834,428	7,296,670	59,458	138,491.86	8.7	.166
TOTALS	3,211,730	29,582,670	204,451	563,369.62	9.2	.175

NOTE: This summary does not include 4994 acres cleared of 151,489 Ribes in the White Mountain National Forest during 1924, and 466 acres eradicated of 49,479 Ribes, at a cost of $284.41 in 1925.

STATUS OF INITIAL RIBES ERADICATION WORK IN THE NORTHEASTERN STATES.

State	Estimated Acreage White Pine Growth	Total Acreage Eradicated of Ribes 1917-1925	Acreage Eradicated of Ribes in 1925	Estimated Pine Acreage Protected	Percent Pine Acreage Protected	Pine Acreage Still to be Protected	Total Area Still to be Eradicated	Eradication Seasons to Complete Initial Project	Yearly Acreage Needed to Complete Project	Ratio of Necessary Annual Acreage to 1925 Acreage
Maine	3,000,000	1,386,432	274,034	924,288	30.8	2,075,712	3,113,568	4 2/5	707,629	2.5 times
N.H.	2,500,000	1,587,556	219,976	1,058,371	42.3	1,441,629	2,162,443	4 2/5	491,464	2.2 "
Vt.	86,000	112,621	25,227	37,540	43.6	48,460	145,380	4 2/5	33,041	1.3 "
Mass.	775,000	783,583	190,945	391,791	50.5	383,209	766,418	4	191,604	1.003 "
Conn.	*190,000 **75,000	67,930	13,308	45,287	60.4	29,713	44,570	2	22,285	1.67 "
R.I.	125,000	232,425	25,640	116,212	93.0	8,788	17,576	1	17,576	.68 "
New Eng.	6,676,000	4,170,547	749,130	2,573,489	38.7	3,987,511	6,249,955	4 2/5	1,463,599	1.95 "
N.Y.	1,500,000	285,034	34,937	190,025	12.7	1,309,975	1,964,962	4 2/5	492,037	14.1 "
New Eng. & N.Y.	8,176,000	4,455,581	784,067	2,763,514	33.8	5,297,486	8,214,917	4 2/5	1,955,636	2.48 "

*State, **Litchfield County.

State	K
Ariz.	3
Ark.	2
Ky.	
Kans.	
Conn.	
Del.	
Ill.	
Ind.	6
Iowa	1
New Eng. & N.Y.	8

of Ribes as follows:- 66 2/3% in Maine, New Hampshire, New York, and Connecticut; 50% in Massachusetts and Rhode Island; and 33 1/3% in Vermont. (The smaller the pine areas, the larger the proportionate protection zones).

5. The total area still in need of Ribes eradication is based on a percentage of the total being added for protection strips, as follows:- 33 1/3% in Maine, New Hampshire, New York and Connecticut; 50% in Massachusetts and Rhode Island; and 66 2/3% in Vermont.

6. In Connecticut, outside of Litchfield County, most of the pine is naturally protected from blister rust. However, in this county, there is about 75,000 acres which require protection.

According to the above table, it will take four states (Maine, New Hampshire, New York and Vermont) the full remaining 4½ years of the eight year control program to complete the initial eradication of Ribes from pine areas needing protection. But, to accomplish these results, Maine must cover during 1926, 2.5 times as much acreage as worked in 1925 and maintain this same rate of progress during the next five years, while in New Hampshire, Vermont and New York, the rate of increase must be maintained at 2.2, 1.3, and 14.1 times respectively the 1925 figures. If Massachusetts maintains its 1925 rate of control work, the initial eradication of Ribes can be completed in this state within four years. Rhode Island and Connecticut can finish their initial project in one and two years respectively. However, it will be necessary for Connecticut to cover in Litchfield County each year 1.35 times as much area as worked in 1925.

In all states there is a varying amount of re-eradication work needed. Surveys should be made in the Northeastern States to determine Ribes conditions on the control areas of 1917 to 1920, comprising 922,720 acres, as pine protection cannot be guaranteed for more than five years under average conditions. Some of the areas will only require scouting, but where Ribes were originally abundant, it will be necessary to re-work them with crews. Our eradication work will be a failure if we do not take adequate measures to cope with the re-growth of Ribes on control areas. The acreage needing re-eradication at the present time in the various states ranges from a few thousand acres in Connecticut to 408,487 acres in New Hampshire. This New Hampshire acreage represents about half the total area worked from 1917-1920. Of course, all this re-eradication work is in addition to the acreage listed in the table as needing eradication of Ribes.

GENERAL SUMMARY

OF COOPERATIVE BLISTER RUST CONTROL ACTIVITIES

IN NEW ENGLAND AND NEW YORK DURING 1925.

EDUCATION

Meetings addressed	627
Attendance	45,522
Field demonstration meetings*	418
Attendance	2,912
Exhibits placed	647
Publications distributed	68,818
News items published	1,294
Posters and signs placed	8,894

SERVICE

Initial interviews	13,819
Follow-up calls	7,380
Individuals instructed in disease and damage	6,833
Individuals instructed in control methods	4,336

*Includes some group demonstrations.

INDIVIDUAL COOPERATION

Number Individuals (Wild & Cult. Ribes eradication.....3069
(Cultivated Ribes eradication only.....958
Cooperating in (Moral support only.....9012

Amount expended by individual cooperators
in control work..... $39,720.06

States in which individuals cooperated.....6

TOWN COOPERATION

Cooperating towns.....132

States in which towns cooperated.....3

Amount of town money appropriated.....$40,989.90

Amount town funds used.....$40,351.31

STATE COOPERATION

States cooperating.....7

Amount state (appropriation) funds used (all projects) -
$100,352.25

RIBES ERADICATION

Acreage cleared of Ribes	834,428*
Acreage of re-eradication work (Included in acreage examined)	50,400
Ribes eradicated — Wild	7,296,670
Ribes eradicated — Cultivated	59,458
Ribes eradicated — Total	7,356,128
Total cost (Ribes eradication)	$138,491.86
Cost per acre	16.6¢
Ribes per acre	8.7

*Note:- Does not include 466 acres worked on the White Mountain National Forest by the Forest Service.

RIBES COMPENSATION

Persons compensated	49
Bushes paid for	1300
Total cost of compensation	$514.55

PERSONNEL

(Cooperative Control Work)

State Leaders (6) Ass't Leaders (2)	8
Blister Rust Control Agents (permanent)	38
Blister Rust Control Agents (temporary)	16
State Supervisors or Eradication Assistants	7
State Checkers	5
Foremen	185
Scouts	40
State Laborers	323
Owners' Laborers	4711
Total Number Men Employed in Field Work (regardless of length of time each worked)	5333

CLASSIFICATION OF FUNDS USED

State appropriations	$100,352.25
Nursery funds	753.31
Town Appropriations	40,351.31
Individual Funds	39,720.06
All Other State Funds	1,695.47
Federal $ for $ Money	131,098.84
Total expenditures	$313,971.24

CONTROL WORK DURING 1925

General Comments:

The year 1925 marked no spectacular changes in the blister rust control program, but steady progress was evident in all activities. The general policy and plan of work remained the same. However, four states (Maine, Vermont, Massachusetts and Rhode Island) prepared definite written policies and plans covering all phases of the work. In all states there was an improvement in written plans and a more careful budgeting of funds. The elimination of the federal specialists and their use on other work was probably the most important change in the blister rust organization during 1925.

The personnel employed in blister rust control work proved to be effective with the possible exception of one agent whose poor health influenced his work. Few changes were made in the organization. Only one new man was added to the permanent force of 36 blister rust control agents in the seven Northeastern States. Clark replaced McDonnell in Connecticut after the latter had resigned. About July 1st, Riley became state leader in Connecticut. Agent Fogg, of Warren County, New York, resigned during January but no one has been appointed to take his place. Clave replaced Merrick, who died during January. The blister rust organization lost a faithful, efficient friend and worker when Merrick joined the gold star service men. Endersbee was appointed blister rust control agent in Berkshire County, Massachusetts July first; this being the first time a permanent agent had been assigned to this county. Holden, a former blister rust control agent in Vermont, became state leader in his state October 15th, replacing Callward, who resigned about May first to become forestry extension specialist. In addition to supervising the work of the Vermont agents, Holden will personally carry on blister rust agent activities in a definite district. During the period May-October, the state leader's duties in Vermont were conducted by Ross, Merrill, and Filler. Control work was completed in two districts during the year. Agent Bradder, of Vermont, was transferred from Caledonia County to Rutland County, and Agent Roop from Essex to Middlesex County, Massachusetts. The average agent's salary on December 31, 1925 was $160.65, compared with $148.75 the previous year.

State appropriations were the same in all states except New Hampshire, where the bi-annual appropriation was increased from $32,000. to $54,000.

The field personnel improved greatly in promptly submitting more accurate records. The monthly BRE2a and b forms were revised at the Boston Office. Each month, copies of these forms and an analysis report of the cooperative control work was sent to the Washington Office, state cooperators, and state leaders. Maps were prepared showing the pine range and pine areas protected from blister rust. Special maps were also made of the Waterford infection area, the Connecticut control study plots, and the agents' districts. The files at the Boston Office were thoroughly revised and a property card system developed.

Several new educational features became available, namely; the film - "The Pines", Spencer Delineascope and screen, federal blister rust circular No. 40, five wing panels, many new damage pictures, enlarged photographs mounted on cloth or cardboard, colored slides, New York poster, blue print posters, special circular letter forms, tags and signs for roadside demonstrations, and a card for requesting information from the Extension Department on subjects which are of interest to special people.

Several plot studies of blister rust damage were made in Maine, New Hampshire, Massachusetts, New York, and Connecticut. All of this material has been summarized and most of it used in educational work. The mature pine stand at Waterford, Vermont was carefully studied for blister rust damage and the infected trees banded with paint. A federal lease of this area and the surrounding pasture has been secured from the owner for demonstration and study purposes. The damage figures for the mature pine stand have been summarised and analyzed, and a report made of this study.

In Connecticut, two cooperative field studies were made; one on crew methods and the other on the effectiveness of control. Preliminary reports have been submitted on both these studies. Surveys on the production, value, and use of white pine were conducted in Vermont and Rhode Island, and progress reports prepared. In New York, Littlefield has conducted a series of studies on Ribes ecology. No report has been received of this work. The federal experimental studies at North Hudson, New York and Eau Galle, Wisconsin were continued and the data are now being summarized and analyzed for each separate project.

All checking of eradication work was performed by state men. New Hampshire had three state inspectors, Connecticut one, and New York five eradication assistants who continually checked on the eradication work. In the other states, the checking was done by the agents or the assistant agents. Massachusetts and Maine need to reorganize their check work inorder to make it more effective.

Agent conferences were held in all the states. These meetings stimulated better acquaintance, analysis of problems and definite plans for accomplishing results. The state leaders' meeting at Washington gave the leaders a better appreciation of the federal activities and helped to develop closer cooperation.

Heavy infection on Ribes was reported from all states. Many of the field men reported the infection on Ribes was the heaviest they had ever seen.

The spring training of the temporary field workers was more extensive and thorough. New York had a specially good training school for field men.

The re-eradication problem became a serious one for the first time. In New Hampshire, five towns appropriated for re-eradication and a total of 41,734 acres were covered. Due to lack of funds, it was impossible to employ a data crew to get definite information on the regrowth of Ribes on these areas. However, it will be possible to compare figures on number of bushes pulled each time the tracts were worked. The re-eradication problem will become increasingly important and definite plans must be made to meet this situation.

The state leaders and agents spent more time on field activities, correspondingly decreasing the amount of office work. More adequate supervision was given to the personnel than during the past years and the leaders obtained a better appreciation of the agents' problems. The winter work of the agents was made more effective, especially in Vermont and Rhode Island where the agents combined their blister rust activities with a survey on the value and use of white pine.

Cooperation with the Extension forces was generally satisfactory. In New Hampshire especially, the cooperation was excellent. Most of the New Hampshire and Massachusetts agents, and some of the New York men, have a desk at the Farm Bureau offices. In many towns, blister rust control has been adopted as a community project and forestry leaders appointed. The blister rust control agents spoke at many of the Farm Bureau meetings and field demonstrations.

DETAILED SUMMARY AND ANALYSIS OF COOPERATIVE CONTROL WORK DURING 1925.

EDUCATION

State	Meetings Addressed		Field Dem. Meetings		Exhibits Placed		Publications Distributed		Items Published		Posters Placed	
	Total	Ave. Per Agent	Total	Ave. Per Agent	Total	Ave. Per Agent	Total	Ave. Per Agent	Total	Ave. Per Agent	Total	Ave. Per Agent
Maine	45	11.2	20	5.0	67	16.7	3560	890.0	106	26.5	843	210.7
N.H.	245	27.2	69	7.7	294	32.7	27,014	3001.5	454	50.4	3083	342.5
Vt.	74	24.7	23	7.7	66	22.0	2317	772.3	44	14.7	673	224.3
Mass.	61	9.4	78	12.0	63	9.7	15,074	2319.1	297	45.7	555	85.4
R.I.	7	7.0	-	-	20	20.0	1200	1200.0	12	12.0	228	228.0
Conn.	1	.5	1	.5	12	6.0	528	264.0	58	29.0	39	19.5
N.Y.	190	19.0	37	3.7	63	6.3	17,249	1724.9	320	32.0	1041	104.1
Totals 1925	623	17.5	228	6.4	585	16.5	66,942	1885.7	1291	36.4	6462	182.0

(This table includes only the work of the permanent agents)

Analysis of Educational Activities:

1. During 1925, a total of 35.5 permanent blister rust control agents (weighted average number), and 17 temporary agents addressed 627 meetings attended by 45,522 people, held 418 field meetings or group demonstrations at which 2912 persons were present, set up 680 exhibits, distributed 68,818 publications, published 1294 news items, and placed 8894 posters. Compared with the 1924 results, slight decreases are noted in number of meetings addressed, attendance, and posters placed, but increases occur in exhibits, publications, and news items.

2. The temporary agents did only a small proportion of the total amount of educational work. But when the educational activities in Maine alone are considered, the 13 temporary agents in this state arranged 54.7% of the exhibits, distributed 33.8% of the publications, and placed 72.1% of the posters.

3. No direct comparison of the results accomplished in the different states is entirely satisfactory because of varying conditions. However, the table does show what each state did along educational lines. In the volume of educational work conducted by the average permanent agent, the states rank in the following order: (1) New Hampshire - (greatest volume), (2) Vermont, (3) Massachusetts, (4) New York, (5) Maine, (6) Rhode Island, and (7) Conn. New Hampshire was strong in all items. Vermont slumped in news items and publications distributed. Massachusetts was weak in posters, exhibits, and meetings; New York in exhibits and posters; Maine in news items and publications distributed, and only fair in the other activities. Rhode Island rated low in news items, demonstrations and meetings; and Connecticut in all phases except news items.

4. The monthly average per permanent agent during 1925 was as follows:- 1.4 meetings, .5 field demonstration meeting, 1.37 exhibits, 157.1 publications distributed, 3.0 news items, and 15.1 posters placed. A study of the work of each agent gives even a clearer insight into the educational work. In one state, two of the agents did not have any exhibits during the year and one of these men did not give any talks during the first ten months of the year. In another state, two of the agents did not give any blister rust talks. The statement has been made that the educational phase of the work has been overemphasized. These figures do not show it. New Hampshire is the only state where a large volume of such work has been conducted, and in this particular state it is very much needed inorder to obtain adequate town support. During at least half of the year, all of the agents' time is given to educational and service work, and during the other

months, about one half of his time is spent on these two activities. (Most of the agents' office work can fairly be classed under these projects).

5. The educational work needs to be better planned and given its proper place in a well balanced control program. The educational activities will not take care of themselves as one agent has mentioned in his annual report. Systematic education is a part of every sales campaign. As expressed by Mr. Graham - "It greases the skids for personal contact". Effective service work cannot be carried on without well planned and adequate educational activities. It is a case of every phase of the control program being properly balanced. In planning the educational activities, more thought should be given to the particular need, time, and place.

6. The results of the educational work in several states during 1925 showed the average field meeting did not justify the time and expense involved. Small impromtu group demonstrations proved to be much more effective and efficient. News items continued to be the best educational feature in creating attention, interest, and desire. However, this feature was conducted too much on a hit or miss basis; over or under emphasis being noted in several places. The remedy lies in each agent planning, in advance, on a definite minimum number of articles per year for each worthwhile agency.

Blister rust exhibits at the headquarters of several of the agents were of special value in arousing local interest. In all states, blister rust exhibits were placed at the fairs, but window exhibits were slighted in most states, except Mass. These window exhibits can be arranged so cheaply and effectively, their greater use should be encouraged. Colleges and high schools should be adequately supplied with suitable material for class room and exhibit purposes.

On the whole, more originality and care are needed to produce better and more suitable exhibits. The following suggestions, based on careful observations, are listed as an aid in preparing exhibits:

1. If possible, select a place where the crowd must pass.

2. Make the design simple, use original ideas if possible.

3. Have main objective stand out clearly, eliminate details which are not essential.

4. Motion and color attract most attention.

5. Label exhibit with large suitable sign.

6. Have all signs neatly lettered - vary size of letters to emphasize certain words - colors help.

7. Fresh specimens of infected pine and Ribes are always best. Yellow tags show up well on such material. The large cankers attract special attention.

8. If charts are used, they should be very simple.

9. Talking helps to attract the crowd.

10. Have suitable and sufficient literature within easy reach.

11. In suitable place, have book and pencil so prospects' names can be listed for free inspection of their pine.

12. The securing of prospects depends largely on the one attending the exhibit. He must be a go-getter.

The best results at meetings were obtained when a local society was used to sponser the affair. Slide talks proved very effective; their greater use should be encouraged. A combination of motion pictures and slides also worked well. More talks should be given at schools, colleges, meetings of teachers, commercial interests, etc.

Martin's federal blister rust circular and York's poster were well received. There is still need for state circulars outlining local conditions, a federal bulletin for children, and an additional popular motion picture. The signs and tags designed and produced by the Office of Blister Rust Control, especially for roadside demonstrations and exhibits, were of great value. However, the promiscuous use of such material fastened to trees along the highway, where there is no infection, should be discouraged.

SERVICE

State	No. Initial Interviews		No. Follow-up Calls		No. Individuals Instructed in			
					Control Methods		Disease	
	Total	Ave. Per Agent	Total	Ave. Per Agent	Total	Ave. Per Agent	Total	Ave. Per Agent
Maine	1207	301.7	740	185.0	300	75.0	108	27.0
N.H.	3611	401.2	2736	304.0	2169	241.0	836	92.9
Vt.	1101	367.0	384	128.0	830	276.7	357.	119.0
Mass.	3758	578.1	1021	157.1	963	148.1	827	127.2
R.I.	263	263.0	76	76.0	51	51.0	22	22.0
Conn.	218	109.0	90	45.0	81	40.5	18	9.0
N.Y.	1460	146.0	1749	174.9	906	90.6	976	97.6
Totals 1925	11,618	327.3	6796	191.4	5300	149.3	3144	88.6

(This table includes only the work of permanent agents)

Analysis of Service Work:

1. During 1925, the permanent and temporary blister rust control agents had 13,819 initial interviews and 7380 follow-up calls. A total of 6833 individuals were instructed in the disease and damage and 4336 persons were shown control methods. Compared with the 1924 results, a slight decrease occurred in number of initial interviews, but commendable increases are noted in number of individuals instructed in the disease and control methods. The number of follow-up calls during 1925 increased 8.5% over the previous year.

2. In Maine, the temporary agents held 62.2% of the total interviews, 42.0% of the follow-up calls, taught 83.0% of the total number of individuals instructed in disease and damage, and 91.7% of the persons shown control measures.

3. The records do not give any sub-division of interviews. However, from the number of persons promising cooperation can be obtained a fair idea of the total number of interviews in each class. Of the 13,881 persons promising cooperation, 65% gave only general support, 27.4% promised to eradicate their wild Ribes and 7.6% their cultivated bushes only.

4. New Hampshire and Massachusetts ranked first in the volume of service work performed by the permanent agents, Maine and New York second, Vermont third, Rhode Island - fourth, and Connecticut - fifth. If the service work of the temporary agents was included in the above statement, Maine would rank first. Although New York rated second, yet her agents had a very low average in initial interviews, the other service items offsetting this slump. As nearly all the control work in Connecticut and Rhode Island was conducted by the state, rather than in cooperation with towns and individuals, a low rating in service activities is to be expected in these states. Massachusetts rated first in the average number of interviews per agent. However, 44.7% of the total interviews in this state were held by one of the seven agents.

5. The daily average per permanent agent (292 working days per year) during 1925 was as follows: 1.1 initial interviews, .6 follow-up calls, .5 persons instructed in disease and damage, and .3 individuals shown control measures. During 1924, the follow-up calls averaged the same, and the number of initial interviews was only .3 greater. In fact, the daily average figures have been almost the same for the last three years.

6. Service work is the backbone on the control program. It takes backbone to do it. The arms and feet will never be used in eradicating Ribes unless the "backbone" has produced cooperation. So every effort should be made to increase the volume and effectiveness of service work. Better planning and organizing of the agents' activities will allow more time for this project. Concentration of interviews, as far as practicable, will save time in travel and prevent hit and miss efforts. A greater use of small group demonstrations, rather than all individual work, may be possible under favorable conditions. In some states, scouting can be decreased and the time saved applied to service projects, especially in districts where pine, Ribes, and infection conditions are generally known. More interview work is needed, especially with commercial interests, during the winter months.

COOPERATIVE RIBES ERADICATION IN THE NORTHEASTERN STATES DURING 1925.

The 1925 eradication season was a most unusual one. An excessive amount of rainy weather frequently prevented field work and in many cases indefinitely postponed cooperative projects. The early defoliation of Ribes brought field activities to a close about two weeks ahead of normal. Scouting revealed less need for crew work than usual, consequently is some states expenditures by individuals was correspondingly decreased. During 1925, a total of $30,683.66 less money was expended on the project - "Ribes Eradication" than in 1924.

Summary of Total Results of Cooperative Ribes Eradication Work in New England and New York During 1925.

State	No. Acres Eradicated	Ribes Pulled		Total Cost	Per Acre Values	
		Wild	Cult.		Cost	Ribes
Maine	274,678	1,710,015	15,041	$20,257.62	.073	6.2
N.H.	261,244	3,244,332	6,402	44,614.97	.170	12.4
Vt.	26,622	317,837	640	9,058.12	.340	11.9
Mass.	195,201	751,830	33,610	21,759.45	.111	3.8
Conn.	16,106	272,797	684	5,495.30	.341	16.9
R.I.	25,640	4,994	1,928	1,519.04	.059	.1
N.Y.	34,937	994,865	1,153	35,787.36	1.024	28.4
Totals 1925	834,428	7,296,670	59,458	$138,491.86	.166	8.7
Totals 1924	1,008,042	9,466,271	73,858	$169,175.52	.167	9.4
% Increase or Decrease	-17.2%	-22.9%	-19.4%	-18.1%	-0.6%	-7.4%

Summary does not include 466 acres, in the White Mountain National Forest, cleared of 49,479 Ribes at a cost of $284.41, but does include work on state lands in Mass., N.H., Vt., and New York.

Analysis:

1. In the seven Northeastern States, 834,428 acres were cleared of 7,296,670 wild and 59,458 cultivated Ribes at a cost of $138,491.86, or 16.6 cents per acre.

2. It cost, on the average, 16.6 cents per acre to destroy 8.7 Ribes per acre, or 1.8 cents per bush. The number of Ribes and cost per acre ranged from .1 of a bush at 5.9 cents in Rhode Island to 28.4 bushes at $1.02 in New York.

3. Comparison of results accomplished in cooperative Ribes eradication in Northeastern States between years 1924 and 1925:

	1924	1925	% Increase or Decrease 1925 over 1924
Acres eradicated**	1,008,042	834,428	-17.2%
Wild Ribes pulled	9,466,271	7,296,670	-22.9%
Cult. Ribes pulled	73,858	59,458	-19.4%
Total cost	$169,175.52	$138,491.86	-18.1%
Cost per acre	$0.167	$0.166	-0.6%
Ribes per acre	9.4	8.7	-7.4%
No. cooperating towns	147	132	-10.2%
Amount town appropriations	$47,352.81	$40,989.90	-13.4%
Amount town money used	$48,022.14*	$40,351.31	-15.9%
No. individual cooperators (Wild Ribes eradication)	3059	3069	+ 0.3%
Amount paid by individual cooperators (Wild Ribes eradication only)	$45,698.43	$39,720.06	-13.1%

*Includes balance from preceding years' town funds.
**Does not include eradication work on White Mountain National Forest.

4. Comparison of acreage eradicated of Ribes and per acre costs in the states of the Northeast during 1924 and 1925:

State	Acreage Eradicated		Percent or - in Acreage eradicated over 1924	Cost per Acre		Increase or Decrease in per Acre cost 1925 over 1924	Increase or Decrease Ribes per acre 1925 over 1924
	1924	1925		1924	1925		
Maine	401,227	274,678	-31.5%	$.057	$.073	+ $.016	+ 1.2
N.H.	326,458	261,244	-19.9%	.165	.170	+ .005	0
Vt.	25,688	26,622	+ 3.5%	.361	.340	-.021	+ 4.8
Mass.	159,776	195,201	+ 18.1%	.217	.111	-.106	-8.8
R.I.	52,480	25,640	-51.1%	.044	.059	+ .015	-0.4
Conn.	17,215	16,106	-6.4%	.347	.341	-.006	+ 0.2
N.Y.	25,198	34,937	+ 27.8	1.62	1.02	-.60	-13.7
Totals	1,008,042	834,428	-17.2	.167	.166	-.001	-0.7

Three states - New York, Massachusetts and Vermont, showed increases in acreage worked during 1925 over the previous year. The increases in New York and Massachusetts were especially commendable. The decreases in the per acre costs in these states were due largely to fewer bushes being pulled. In the other four Northeastern States, the acreages cleared of Ribes in 1925 were considerably less than during 1924. The percentage of decrease ranged from 6.4% in Connecticut to 51.1% in Rhode Island. In these two states, the acreages worked were rather small, so the total figures for all states was not seriously affected by these results. But the decreases in Maine and New Hampshire, of 31.5% and 19.9% respectively, with the large acreage envolved, were mainly responsible for the 17.2% decrease in total area worked in the Northeastern States during 1925. In New Hampshire, less work was done because a smaller amount of town funds was available, but in Maine the decrease was largely due to a more definite record system which prevented any eliminated areas being included with the total acreage reported as cleared

of Ribes. Such a discrepancy occurred during the previous year. The slump in Rhode Island was caused by the state expending 34% less money on eradication work than in 1924. It was necessary to use state funds to pay the agent's salary and expenses from May 1st to September 15th inorder to offset federal expenditures for the wages of scouts during the previous eradication season, when a filibuster in the state senate prevented passage of appropriation bills.

DETAILED SUMMARY AND ANALYSIS OF RIBES ERADICATION WORK IN THE NORTHEASTERN STATES DURING 1925, BASED ON THE FOUR CLASSES OF CONTROL WORK.

I. Individual Cooperation in Ribes Eradication During 1925:

State	No. Cooperators		% of Total No. Cooperators (Wild Ribes Eradication) in Northeastern States Obtained in Each State	Total Cost To Individuals	% of Total Cost to Individuals in Northeastern States Shared by Cooperators in Each State
	Wild and Cult. Ribes Eradication	Cult. Ribes Only			
Maine	1548	47	50.5	$9337.30	23.5
N.H.	30	-	1.0	2090.76	5.3
Vt.	258	38	8.4	8137.50	20.5
Mass.	890	873	29.0	5554.15	13.9
Conn.	23	-	.7	80.00	.2
N.Y.	320	-	10.4	14,520.35	36.6
Totals	3069	958	100.0	$39,720.06	100.0

Analysis:

1. A total of 4027 individuals expended $39,720.06 on control work during 1925, 3069 owners cooperating in eradicating wild bushes, and 958 additional persons in destroying their cultivated Ribes. In addition, several hundred people allowed their cultivated bushes to be destroyed without compensation.

2. All the Northeastern States, except Rhode Island, had individual cooperation in control work. Maine and Mass. led in the number of such cooperators, (79.4% of the total), but New York ranked first in the amount of individual funds,

n

even though it had only 320 cooperators in eradicating wild Ribes compared with 890 in Massachusetts and 1548 in Maine.

3. The percent of increase or decrease in individual cooperation in Ribes eradication during 1925 over 1924 is as follows:

Number individual cooperators	(wild Ribes eradication.....	+0.3%
	(cult. Ribes eradication only.....	-44.1%
Amt. expended by individual cooperators.....		-13.1%

During 1925, expenditures by individual cooperators in Vermont and New York increased 10.1% and 14.4% respectively, over the previous year. In Connecticut, $16.85 more money was expended by individuals than in 1924, not including the individual subscriptions made for town work in 1924. Decreases occurred in the other states as follows: Maine-12.0%, New Hampshire-19.0%, and Massachusetts-51.8%. In New Hampshire, a special effort was made to secure a greater amount of individual cooperation to offset the slump in town funds, but the results obtained were not satisfactory. In Massachusetts, the decrease in individual funds of $5972.89 will make it difficult for this state to offset federal expenditures on a dollar for dollar basis. This decrease was due in part to the scouts finding fewer areas needing crew work, consequently less individual money was spent.

The individual cooperative work in Ribes eradication was conducted in one of two ways, <u>without</u> direct state supervision or <u>with</u> direct state supervision. This work will, therefore, be summarized and analyzed on this basis.

RESULTS OF INDIVIDUAL COOPERATION IN RIBES ERADICATION
WITHOUT DIRECT STATE SUPERVISION

State		Maine	Vermont	Mass.	Totals
No. Coop. Who Erad.	Cult. Ribes only	0	27	151	178
	Wild Ribes	9	1	43	53
	Total	9	28	194	231
Acres eradicated		681	1515	3536	5732*
Ribes Pulled	Wild	38,718	2944	4926	46,588
	Cultivated	0	87	3624	3711
No. Men employed		20	60	406	486
Total cost of erad. work		$380.60	$447.00	$472.09	$1299.69
Per acre cost		$0.56	$0.295	$0.133	$0.227

*An additional 50 acres were reported from Connecticut, but no other figures were available as to this work.

Analysis:

1. In three states (Maine, Vermont, and Massachusetts) 53 owners eradicated 46,588 wild Ribes from 5732 acres without direct state supervision. In addition, 178 owners destroyed 3711 cultivated bushes.

2. Of the total amount of unsupervised work, 87.9% was performed in Massachusetts and Vermont.

3. The acreage worked by individuals, without supervision, represents only .6% of the total area cleared of Ribes in the Northeastern States during 1925.

4. This unsupervised work cost the owners $1299.69, or 22.7 cents per acre, which was ten cents per acre less than the supervised work. This difference in cost was probably due to the Ribes numbering only 8.1 bushes per acre for the unsupervised work and 17.2 Ribes for the work directed by state foremen.

5. The percent of increase or decrease in amount of individual cooperation, without supervision, during 1925 over 1924 is as follows:

No. cooperators eradicating wild and cult. Ribes.....-57.0%

No. cooperators eradicating cultivated Ribes only.....-68.2%

No. acres eradicated of Ribes.....-22.8%

No. wild Ribes pulled.....-67.6%

No. cultivated Ribes pulled.....-72.9%

No. men employed.....+117.0%

Total cost.....-54.2%

Per acre cost.....-40.6%

RESULTS OF INDIVIDUAL COOPERATION, WITH DIRECT STATE SUPERVISION, IN RIBES ERADICATION WORK IN THE NORTHEASTERN STATES DURING 1925.

State		Maine	N.H.	Vt.	Mass.	Conn.	N.Y.	Totals
Coop. Erad.	Cult. Ribes Only	47	0	37	722	0	0	806
	Wild and Cult. Ribes	1539	30	217	847	23	320	2976
Acreage eradicated		39,771	7814	24,737	99,346	1178	31,253	204,099
Wild Ribes pulled		1,652,569	178,645	302,919	506,397	16,014	863,892	3,520,436
Cult. Ribes pulled		14,941	195	553	24,156	102	1153	41,100
Cost	State	$23.76	$557.53	$631.81	$6922.51	$153.81	$13,012.32	21,301.74
	Federal	16.67	-	-	-	-	-	16.67
	Town	6993.23	-	96.64	-	-	-	7089.87
	Individuals	8956.70	2090.76	7690.50	5082.06	80.00	14,520.35	38,420.37
	Total	$15,990.36	2648.29	8418.95	12,004.57	233.81	27,532.67	66,828.65
Cost per acre		.402	.339	.340	.121	.198	.881	.327
Ribes per acre		41.5	22.8	12.2	5.1	13.6	27.7	17.2

Analysis:

1. Individual cooperation, with direct state supervision, was conducted during 1925 in all the Northeastern States except Rhode Island. The amount of such work varied from 1178 acres in Connecticut to 99,346 acres in Massachusetts.

2. A total of 2976 owners cooperated in eradicating their cultivated bushes and 3,520,436 wild Ribes from 204,099 acres at a per acre cost of 32.7 cents. An additional 806 cooperators destroyed their cultivated bushes.

3. Maine and Massachusetts together had 80.2% of the total number of individual cooperators, with supervision, in the Northeastern States, but New York with only 320 cooperators in wild Ribes eradication, compared with 1539 in Maine and 847 in Massachusetts, slightly exceeded the total amount expended by individuals in both these states.

4. The acreage worked by individual cooperators, with direct state supervision, represents 24.4% of the total area cleared of Ribes in the Northeastern States during 1925.

5. The total cost of this individual cooperative work, with supervision, was $66,828.65, the cooperators sharing the expense in the following proportions: individuals--57.5%, towns---10.6%, states---31.8%, and Government---0.1%.

6. The percent of increase or decrease in amount of individual cooperation (with supervision) during 1925 over 1924 is as follows:

No. cooperators eradicating cult. Ribes only		-30.1%
No. cooperators eradicating wild and cult. Ribes		+1.6%
No. acres eradicated		+3.3%
No. wild Ribes pulled		-13.9%
No. cultivated Ribes pulled		+72.3%
Cost	State	+16.6%
	Towns	-10.8%
	Individuals	-8.0%
	Total	-1.7%
Cost per acre		-5.2%

SUMMARY OF ALL INDIVIDUAL COOPERATION, WITH AND WITHOUT DIRECT STATE SUPERVISION, IN RIBES ERADICATION WORK IN THE NORTHEASTERN STATES DURING 1925.

State		Maine	N.H.	Vt.	Mass.	Conn.	N.Y.	Totals
Coop. Erad.	Cult. Ribes Only	47	0	38	873	0	0	958
	Wild and Cult. Ribes	1548	30	258	890	23	320	3069
Acreage eradicated		40,452	7814	26,252	102,882	1178	31,253	209,831
Wild Ribes pulled		1,691,287	178,645	305,863	511,323	16,014	863,892	3,567,024
Cult. Ribes pulled		14,941	195	640	27,780	102	1,153	44,811
Cost	State	$23.76	$557.53	$631.81	$6922.51	$153.81	$13,012.32	$21,301.74
	Govt.	16.67	-	-	-	-	-	16.67
	Towns	6993.23	-	96.64	-	-	-	7089.87
	Individuals	9337.30	2090.76	8137.50	5554.15	80.00	14,520.35	39,720.06
	Totals	16,370.96	2648.29	8865.95	12,476.66	233.81	27,532.67	68,128.34
Cost per acre		.405	.339	.337	.121	.198	.881	.325
Ribes per acre		41.8	22.8	11.6	4.9	13.6	27.7	17.0

Analysis:

1. Individual cooperation in Ribes eradication was secured in all the Northeastern States except Rhode Island where there are so few Ribes the state pays for the control work. The acreage worked by individual cooperation ranged from 1178 acres in Connecticut to 102,882 acres in Massachusetts.

2. A total of 3069 owners cooperated in eradicating their cultivated bushes and 3,567,024 wild Ribes from 209,831 acres, at a per acre cost of 32.5 cents. An additional 958 cooperators destroyed their cultivated bushes.

3. Maine and Massachusetts together had 79.4% of the total number of individuals eradicating wild Ribes in the Northeastern States, but New York with only 320 cooperators, compared with 890 in Massachusetts and 1548 in Maine, almost equalled the total amount of individual funds expended in both these states.

4. The acreage worked by all individual cooperators represents 25.1% of the total area cleared of Ribes in the Northeastern States during 1925.

5. The total cost of all the individual cooperative work was $68,128.34, the cooperators sharing the expense in the following proportion: individuals...58.3%, towns...10.4%, states...31.2%, and the Government...0.02%. The percent of the total cost of the individual cooperative work in each state paid by the individual cooperators in the respective states is as follows: Maine...57.0%, New Hampshire...78.9%, Vermont..91.8%, Massachusetts...44.5%, Connecticut...34.2%, and New York...52.7%.

6. The percent of increase or decrease in amount of all individual cooperation during 1925 over 1924 is as follows:

No. cooperators eradicating cult. Ribes only		-44.1%
No. cooperators eradicating wild and cult. Ribes		+0.3%
No. acres eradicated		+2.3%
No. wild Ribes pulled		-16.1%
Cost	States	+16.6%
	Towns	-10.8%
	Individuals	-10.9%
	Total	-3.8%
Cost per acre		-5.8%
Ribes per acre		-18.0%

II. TOWN COOPERATION IN RIBES ERADICATION WORK DURING 1925.

State	No. Towns Approp.	% of Total No. in Each State	Amount Approp.	% of Total Funds Approp. in Each State	Amount Town Funds Used	% of Total Funds Used in Each State
N.H.	78	59.1%	$32,725.00	79.8%	$33,075.04*	81.9%
Me.	51	38.6	8,000.00	19.5	7,179.63	17.8
Vt.	3	2.3	264.90	.7	96.64	.3
Totals	132	100.0	$40,989.90	100.0	$40,351.31	100.0

*This total includes unexpended balances from 1924 appropriations used during 1925. In two New Hampshire towns, individuals subscribed $503. for town control work.

Analysis:

1. In three states, (Maine, New Hampshire, and Vermont), $40,989.90 was appropriated for control work.

2. Of the total number of towns appropriating, 59.1% were located in New Hampshire, and also 81.9% of the total amount of town funds were raised in this state.

3. In Maine, the town money was used to pay the wages of town foremen supervising individual cooperative work, but in New Hampshire, the town funds were turned over to the state and used to eradicate Ribes from definite blocks regardless of property lines. The town money in Vermont was used to pay transportation and excess labor charges of foremen used in individual cooperative work.

4. The percent of decrease in town cooperation during 1925 over 1924 is as follows:

No. towns appropriating.....-10.2%

Amount of town funds appropriated.....-13.4%

Amount of town funds used.....-15.9%

5. Newman attributes the 16% decrease in town funds in New Hampshire during 1925 to larger town appropriations for roads and education, and to an increase in number of towns completed. As more and more towns become cleared of Ribes, there is naturally a corresponding decrease in the total amount of town money appropriated. The town appropriations in Maine and Vermont were practically the same for the years 1924 and 1925.

Results of Town Cooperation in Ribes Eradication Work During 1925.

State		New Hampshire
No. acres eradicated		251,669
No. wild Ribes destroyed		2,983,216
No. cult. Ribes destroyed		6,118
Cost of Work	Towns	$33,075.04
	State	8,271.20
	TOTAL	$41,346.24
Cost per acre		.164
Ribes per acre		11.8

Analysis:

1. New Hampshire was the only state to conduct cooperative Ribes eradication work with towns on the basis of clearing definite blocks of Ribes, regardless of property lines.

2. A total of 251,669 acres were cleared of 2,983,216 wild and 6,118 cultivated Ribes at a per acre cost of 16.4 cents.

3. This acreage represents 30.1% of the total acreage worked in the Northeastern States during 1925.

4. The state of New Hampshire paid 20% of the total cost of this town work.

5. All phases of the town work during 1925 show decreases over 1924 as follows:

Acreage eradicated		-19.8%
Wild Ribes pulled		-25.2%
Cultivated Ribes pulled		-61.9%
Cost of Work	Towns (Including individual subscriptions for town projects)	-19.1%
	State	-44.5%
	Total	-25.9%
Wild Ribes per acre		-3.3%
Cost per acre		-3.0%

III. NON-COOPERATIVE RIBES ERADICATION WORK ON PRIVATE LANDS.

State		Maine	Mass.	Conn.	R.I.	Totals
Acreage eradicated		234,226	91,969	14,928	25,640	366,763
Wild Ribes destroyed		18,728	195,507	256,783	4,994	476,012
Cult. Ribes "		100	5,830	582	1,928	8,440
Cost	Towns	$186.40	-	-	-	$186.40
	State	1623.65	8702.79	5185.54	1519.04	17,031.02
	Govt.	2076.61	-	75.95*	-	2,152.56
	TOTAL	3886.66	8702.79	5261.49	1519.04	19,369.98
Cost per acre		.017	.094	.352	.059	.053
Ribes per acre		.08	2.1	17.2	.19	1.2

*Estimate

Analysis:

Three states, (Maine, Massachusetts, and Rhode Island), conducted non-cooperative scouting on private lands containing few Ribes. In Maine, 85.2% of the total acreage covered was worked on this basis, and in Massachusetts and Rhode Island, 47.2% and 100%, respectively. In Connecticut, 14,928 acres, or 92.6% of the total season's acreage was worked by state crews and scouts at state expense. The total cost of all this non-cooperative eradication work in the four states listed above was $19,369.98 for destroying 476,012 wild and 8440 cultivated Ribes on 366,763 acres, which represents 43.9% of the total area worked in the Northeastern States during 1925.

In Massachusetts and Rhode Island, the entire cost of such work was paid by the state, but in Maine and Connecticut, the Government paid 53.4% and 1.4%, respectively, of the scouting costs.

The total cost figure, $19,369.98, given above actually represents the cost of examining the total 1925 areas worked in Maine, Massachusetts, and Rhode Island, (495,169 acres);

plus the cost of eradicating 219,229 wild and 7858 cultivated Ribes from 351,835 acres in these three states, plus the $5185.54 cost of scout and crew work in Connecticut on 14,501 acres.

The percentage of increase or decrease in 1925 over similar non-cooperative Ribes eradication work on private lands in 1924 is as follows:

Acreage eradicated	-20.4%
No. wild Ribes pulled	+262.7%
No. cultivated Ribes pulled	-58.1%
Cost (State	+41.0%
Cost (Govt	-45.8%
Cost per acre	+51.4%
Ribes per acre	+300.0%

IV. RIBES ERADICATION WORK ON STATE FOREST LANDS DURING 1925.

State	Acreage Eradicated	Ribes Pulled		Total Cost	Per Acre Values	
		Wild	Cult.		Ribes	Cost
N.H.	1761	82,471	89	$620.44	46.8	.352
Vt.	370	11,974	-	192.17	32.4	.519
Mass.	350	45,000	-	580.00	128.5	1.65
N.Y.	3684	130,973	-	8254.69	35.5	2.24
Totals	6165	270,418	89	$9647.30	40.6	1.56

Analysis:

1. Four states (New Hampshire, Vermont, Massachusetts, and New York) conducted control work on state forest lands, clearing 6,165 acres of 270,418 Ribes at a cost of $9647.30, or $1.56 per acre. Most of the work was performed in New York and New Hampshire.

2. The total acreage (6165 acres) eradicated on state lands represents only 0.7% of the total area worked in the Northeastern States during 1925.

3. The entire cost of this work was paid from state funds. In Massachusetts, the State Conservation Commission supervised and paid for this work, rather than the State Dept. of Agriculture which handles the expenditure of state blister rust funds. The blister rust control agents supervised all this work in New Hampshire and Vermont, and 55.3% of this work in New York.

4. Only one state camp was maintained in New York during 1925, E. T. McAveigh being in charge. A total of 88,087 Ribes were cleared from 1650 acres at a cost of $6865.84, or $4.16 per acre. The Ribes per acre numbered 53.3 bushes. Control work on state forest land was conducted in all the New York districts except Warren County. The cost per acre ranged from 13 cents in Harpp's district to $4.45 in Kennedy's territory; the number of Ribes varied accordingly.

5. The percent of increase or decrease in 1925 over similar state land work in 1924 is as follows:

Acreage examined.....-61.2%

Ribes destroyed.....-75.5%

Total cost.....-63.5%

Cost per acre.....-6.0%

Ribes per acre.....-41.8%

STATE COMPENSATION FOR CULTIVATED RIBES DESTROYED IN THE NORTHEASTERN STATES DURING 1925.

State	Total No. Cult. Ribes Destroyed	No. Bushes For Which Compensation Was Paid	% of Total Bushes Paid For	No. Persons Paid Compensation	Amount Paid	Ave. Per Bush Compensation
Maine	15,041	0	0	0	0	0
N.H.	6,402	0	0	0	0	0
Vt.	640	69	10.7	8	$32.50	$0.471
Mass.	33,610	980	2.9	23	377.10	.385
Conn.	684	0	0	0	0	0
R.I.	1,928	0	0	0	0	0
N.Y.	1,153	251	21.7	18	104.95	.418
Totals 1925	59,458	1300	2.2	49	$514.55	.395
Totals 1924	73,858	6426	8.6	91	1690.05	.263

Analysis:

1. The public interest in blister rust control is further emphasized by the splendid cooperation in eradicating cultivated Ribes. Although 59,458 bushes were destroyed during 1925, the states only had to compensate for 1300 bushes, or 2.2%, compared with 8.6% in 1924. A total of $514.55 compensation was paid to 49 persons during 1925. The average cost per bush was 39.5 cents. In 1924, $1690.05 was expended for compensation and the average rate per bush was 26.3 cents. Based on total number of cultivated Ribes destroyed, with and without compensation, .8 cents per bush was paid during 1925 compared with 2.2 cents in 1924.

2. In four states, (Maine, New Hampshire, Rhode Island, and Connecticut), no compensation was paid for destroying 24,055 cultivated Ribes. In the other three Northeastern States,

the amounts paid for compensation ranged from $32.50 in Vermont to $377.10 in Massachusetts. Although Massachusetts expended the largest amount for compensation, yet it only paid for 2.9 percent of the total number of cultivated bushes pulled in this state. On the other hand, New York paid for 21.7 percent of the bushes it destroyed.

State	Amount Paid by Individuals	Amount Spent by Towns	Amount Spent From State Appropriation	All Other State Funds	Federal Funds on Scouting	Total Funds Spent by All Cooperators
Maine	$9,337.30	$7,179.63	$1,647.41	-	$2,093.28	$20,257.62
N.H.	2,090.76	33,075.04	9,449.17	-	-	44,614.97
Vt.	8,137.50	96.64	823.98	-	-	9,058.12
Mass.	5,554.15	-	15,625.30	$580.00	-	21,759.45
R.I.	-	-	1,519.04	-	-	1,519.04
Conn.	80.00	-	5,339.35	-	(Est.) 75.95	5,495.30
N.Y.	14,520.35	-	21,267.01	-	-	35,787.36
Totals	39,720.06	40,351.31	55,671.26	580.00	2,169.23	138,491.86

[illegible]	11.449.12	29.621.24	02.[illegible]
[illegible]	47.644.6	40.240.22	44.[illegible]
[illegible]	86.656	43.96	03.[illegible]
[illegible]	02.852.21	–	31.[illegible]
[illegible]	40.612.1	–	–
[illegible]	32.622.3	–	00.[illegible]
[illegible]	10.422.12	–	32.[illegible]
[illegible]	32.149.22	12.122.04	50.[illegible]

CLASSIFICATION OF COOPERATIVE BLISTER RUST CONTROL FUNDS USED ON PROJECT "RIBES ERADICATION" IN NORTHEASTERN STATES DURING 1925.

Analysis:

1. The cost of three state inspectors in New Hampshire and five eradication assistants in New York are not included in the costs listed under project "Ribes Eradication".

2. During 1925, a total of $138,491.86, or 44.1% of the total expenditures for all blister rust control projects in New England and New York, was used on the project "Ribes Eradication" compared with $169,175.52 and a percentage figure of 49.5 % in 1924.

3. Proportion paid by the various cooperators during 1924 and 1925 on the project - "Ribes Eradication":

Source of Funds	Amount Expended 1924	Amount Expended 1925	% Decrease 1925 over 1924	Percent of Total Amount Spent by Each Cooperating Class	
				1924	1925
Individuals	$45,698.43	$39,720.06	-13.1	27.0	28.7
Towns	48,022.14	40,351.31	-15.9	28.3	29.1
State Appropriations	65,602.63	55,671.26	-15.1	38.8	40.2
Other State Funds	5,879.93	580.00	-90.1	3.5	0.4
Govt. (Scouting)	3,972.39	2,169.23	-45.3	2.4	1.6
Totals	169,175.52	138,491.86	-18.1	100.0	100.0

The amounts expended by the various cooperators on the project "Ribes Eradication" in 1925 were less in all cases than during the preceding year. The total amount of money used on this project during 1925 decreased $30,683.66, or 18.1%, over 1924. In comparing the percentage of total amount of funds used by the cooperating agencies on Ribes eradication during 1925 with 1924, minor increases are noted in percentage of individual, town, and state appropriation funds expended, and slight decreases in percentage of other state funds used and Government expenditures.

4. Percent of total amount of money used in each state by all cooperators on "Ribes Eradication" project, expended by individuals:

State	Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	Totals
1924	46.0	4.9	79.6	33.2	.7	19.0	30.3	27.0
1925	46.1	4.7	89.8	25.5	0	1.5	40.6	28.7

Massachusetts and Connecticut showed marked decreases during 1925 in the proportionate part of individual funds expended on this project, but in Vermont and New York there were substantial increases. In Maine and New Hampshire, the percentage was about the same for both years.

5. Comparison of the percentage of the cost to individuals in each state to the total cost to individuals in all states for the project - "Ribes Eradication" during 1924 and 1925:

State	Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	Totals
1924	23.2	5.6	16.2	25.2	.03	2.5	27.2	100.0
1925	23.5	5.3	20.5	13.9	0	.2	36.6	100.0

In Vermont and New York during 1925, the individual cooperators paid a higher percentage of the total cost of eradication work to individuals in all states than during the preceding year, but in Massachusetts there was a decided decrease.

6. Percent of total amount of money, used in each state, by all cooperators on Ribes Eradication project, expended from town funds:

State	Maine	N.H.	Conn.	Vt.	Totals
1924	35.1	75.1	2.1	.9	28.3
1925	35.4	74.1	0	1.1	29.1

The proportionate share of eradication costs paid by towns is practically the same for the years 1924 and 1925 in all states except Connecticut where no town funds were available during 1925. The decrease in town funds in New Hampshire during 1925 did not change to any extent, the proportionate share of the eradication costs borne by the New Hampshire towns.

7. Percent of total funds, used on Ribes Eradication project by all cooperators in each state, expended from state appropriations:

States	Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	Totals
1924	7.7	20.0	19.5	49.9	39.3	78.9	69.7	38.8
1925	8.1	21.2	9.1	71.8	100.0	97.1	59.4	40.2

In Vermont and New York during 1925, a smaller percentage of the state appropriation funds were used on the project "Ribes Eradication", consequently, individual cooperators paid a larger share of the cost of this project. However, in Massachusetts and Connecticut, the state assumed a much larger part of the cost of control work in 1925 than during the previous year. In Massachusetts, the state scouts found fewer areas needing crew work, therefore less individual funds were used. In Connecticut, not much effort was made to secure cooperation during 1925, the state paying nearly the entire cost of eradication work. Rhode Island continued to pay all costs of eradication work as in the past. The low percentage figure in state expenditures in Rhode Island during 1924 was due to the Government paying part of the cost of scout work, when state funds were not available. In Maine and New Hampshire, the proportionate part of state appropriation funds used on eradication work remained practically the same during 1924 and 1925.

8. Percent of total state blister rust appropriation used on project "Ribes Eradication in each state:

States	Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	Totals
1924	43.1	68.2	75.1	96.6	52.1	64.9	41.8	56.1
1925	34.2	57.6	36.2	87.4	60.8	49.0	46.6	55.5

9. The expenditure under heading "All Other State Funds" was for eradication work on state land in Massachusetts. The Massachusetts Conservation Commission supervised and paid for

this work rather than the State Department of Agriculture with whom the Office of Blister Rust Control cooperates. In 1924, the Massachusetts Conservation Commission expended $5879.93 on eradication work, but during 1925 was able to allot only $580.00 for this project, due to a severe cut in the state forestry appropriation.

10. The federal expenditure of $2,169.23 was for Ribes scouting performed by the temporary agents in Maine and for a small amount of scouting done by Agent Miles in Connecticut during 1925. This expenditure represents 1.6% of the total amount of cooperative funds used on the Ribes Eradication project, compared with 2.4% in 1924.

PERCENT OF TIME SPENT ON EACH ACTIVITY BY AVERAGE PERMANENT AGENT IN THE NORTHEASTERN STATES DURING 1925.

State		Education	Personal Service	Super-vision	Scouting	Eradica-tion	Mapping	Office	Travel
Maine		13.1	11.4	20.3	3.8	-	-	30.4	21.0
N.H.		20.6	14.2	14.3	8.3	.5	1.5	17.5	23.1
Vt.		12.1	25.1	5.0	12.3	-	.5	15.5	29.5
Mass.		11.8	10.4	17.7	7.5	.4	1.2	29.2	21.8
R.I.		35.5	13.0	5.8	2.4	.6	-	23.9	18.8
Conn.		18.4	7.5	1.4	27.1	.9	1.1	26.4	17.1
N.Y.		22.9	15.3	7.6	11.6	.1	1.9	18.3	22.3
Totals All States	1925	18.4	14.1	12.2	9.3	.4	1.3	21.6	22.6
	1924	30.1		11.1	10.0	.4	1.3	24.0	22.4

.4 Misc. during 1924.

Analysis of Hours Worked:

1. During 1925, the 38 permanent and 16 temporary agents worked a total of 110,620 hours, of which 14.6% was performed by the temporary men. The agents worked 2.7% more hours in 1925 than during 1924. The average permanent agent worked 2660.3 hours during the year, or 9.1 hours per working day.

2. The average permanent agent's time was spent on projects as follows: (1) travel--22.6%, (2) office--21.6%, (3) education--18.4%, (4) personal service--14.1%, (5) supervision--12.2%, (6) scouting--9.3%, (7) mapping--1.3%, and (8) eradication--0.4%. During 1924, education and personal

service were considered as one project, but in 1925 were kept separate. Comparing the two years' work, 1925 shows commendable improvement in the allocation of time for the various projects. Time spent in the office and in scouting was decreased, and the amount thus saved applied to education, personal service and supervision. However, the agents in three states (Maine, Massachusetts and Rhode Island) slightly increased the proportion of time spent in the office during 1925 over the previous year.

The amount of time spent by the agents on the various projects varies considerably in the different states due to local conditions. The New Hampshire agents approached nearest to the general average for all states, and thus may be considered as having the best balanced program. On the whole, the allotment of the agents' time appears to be fairly satisfactory. However, some changes are needed.

In Massachusetts and Maine, the time spent on educational and service work appears inadequate. Vermont also rates rather low in the amount of time used on educational activities, but offsets this by ranking first in personal service work. In Connecticut, the control work is chiefly carried on by the state, consequently the agents do not need to spend as much time on service work as in other states.

In New York and Connecticut, the state supervisors or eradication assistants performed most of the supervisory work, but in Vermont, where all this work was done by the agents, the time spent on the project does not seem sufficient.

None of the agents used much time on the projects-eradication and mapping. This is as it should be. In Maine, the temporary agents spent most of their efforts in Ribes scouting, but this is not shown in the table as only the time of permanent agents is included in the percentage figures.

In all states, the time given to scouting appears adequate. Considerable scouting is necessary in Connecticut, Vermont and New York, due to the scattered location of pine and, in Connecticut, also to the localization of Ribes.

A large part of the time reported under the project "office" can justly be charged to other activities such as education, mapping, etc. Under the present interpretation of the projects even though an agent is doing educational work, such as writing a news article, in the office, yet all his time is charged to office rather than to education. In Maine, Massachusetts and Connecticut, more time was spent in the office than on any other project. The office work in these three states needs to be decreased considerably and more time given

to personal service activities.

Time spent on travel appears generally to be fairly well allotted, but in New Hampshire, Vermont and New York it is rather high. The town project system in New Hampshire makes it difficult to concentrate the control work, and in Vermont and New York the pine areas are scattered.

State	State Leaders and Assistant Leaders	Permanent B.R.C. Agents	Temporary B.R.C. Agents	State Checkers	State Foremen	State Scouts	State Laborers and Linemen	Owners' Labor	Total
Maine	1	4	13	0	76	6	4	2406	2510
N.H.	2	9	See State Checkers	3	26	28	212	0	280
Vt.	1	3	0	0	10	0	10	269	293
Mass.	1	7	2	0	25	0	4	1039	1078
R.I.	0	1	0	0	0	4	0	0	5
Conn.	1	3	0	1	4	2	31	17	59
N.Y.	2	11	1	1	44	0	62	980	1101
Totals	8	38	16	5	185	40	323	4711	5326

NOTE: In addition to the personnel listed above, four eradication assistants and two supervisors were employed in New York, and one supervisor in Connecticut.

	4	13	0
	9	See State Officers	3
	3	0	0
	7	2	0
	1	0	0
	3	0	1
	11	1	1
	38	16	5

PERSONNEL EMPLOYED ON COOPERATIVE B. R. C. WORK
IN NEW ENGLAND AND NEW YORK DURING 1925
(Regardless of length of time worked)

<u>Analysis</u>:

1. During 1925, a total of 622 state and federal employees were engaged in cooperative blister rust control field work in New England and New York. In addition, 4711 individuals (pine or Ribes owners, or their employees) assisted in eradicating Ribes. Thus, 5333 persons actually participated in the

the field work. In addition, owners paid for the work on their lands but took no personal part in pulling the bushes, and several hundred other persons permitted the destruction of their cultivated Ribes without compensation. Estimated conservatively, over 6000 persons had more or less of an active part in the control work. The agents also reported that 9012 individuals gave their general support, making a total of about 15,000 persons who cooperated directly or indirectly in the control program.

Source of Funds	State Appropria-tions	Nursery Funds	Town Funds	Individual Funds or Labor	All Other Coop State Funds	Total State Funds	Total Federal $ for $ Funds	Total STATE and FEDERAL Funds
Maine	$4,815.86	$500.00	$7,179.63	$9,337.30	G.F.F. $932.30	$22,765.09	$19,349.10	$42,114.19
N.H.	16,414.79	-	33,075.04	2,090.76	-	51,580.59	34,386.75	85,967.34
Vt.	2,274.99	-	96.64	8,137.50	-	10,509.13	11,126.30	21,635.43
Mass.	17,873.26	253.31	-	5,554.15	580.00*	24,260.72	25,012.97	49,273.69
R.I.	2,500.00	-	-	-	183.17	2,683.17	1,471.04	4,154.21
Conn.	10,893.79	-	-	80.00	-	10,973.79	6,703.34	17,677.13
N.Y.	45,579.56	-	-	14,520.35	-	60,099.91	33,049.34	93,149.25
TOTALS	$100,352.25	$753.31	$40,351.31	$39,720.06	$1695.47	$182,872.40	$131,098.84	$313,971.24

*Spent by Massachusetts Dept. of Conservation in eradication work on state lands.

Chart of Massachusetts Debt to Consols on state Income

[illegible]	Liabilities to Sinking Fund	Total Debt	Sinking Fund	Net Debt
[illegible]	38,218,4[illegible]	00,003	28,811,1[illegible]	02,123,6[illegible]
[illegible]	61,414,91	–	40,310,28	37,080,3
[illegible]	56,415,3	–	43,39	03,121,3
1882	54,518,11	–	12,458	51,423,8
1881	3,200,00	–	–	–
1880	61,588,01	–	–	00,08
[illegible]	54,515,24	–	–	11,250,32
[illegible]	24,525,001	12,121,4	12,121,04	90,054,63

STATE AND FEDERAL COOPERATIVE BLISTER RUST CONTROL FUNDS USED FOR ALL PROJECTS IN NEW ENGLAND AND NEW YORK DURING THE CALENDAR YEAR 1925

Analysis:

1. During the calendar year 1925, a total of $313,971.24 was expended on all cooperative blister rust control projects in New England and New York; the Government paying 41.7% and the states and their cooperators 58.3% of the total costs.

2. Comparison of cooperative expenditures in New England and New York paid from various sources during 1924 and 1925:

Source of Funds	Amount Expended 1924	Amount Expended 1925	% Increase or Decrease over 1924	Percent of Total Expenditures	
				1924	1925
Federal $ for $ Money	$122,831.96	$131,098.84	+6.7	35.7	41.7
State Appropriations	117,121.46	100,352.25	-14.3	34.3	31.9
Town Appropriations	48,022.14	40,351.31	-15.9	14.1	12.9
Individual Funds	45,698.43	39,720.06	-13.1	13.4	12.7
Nursery Funds	882.50	753.31	-14.6	.3	.24
All Other State Funds	7,125.03	1,695.47	-76.2	2.1	.5
TOTAL FUNDS	$341,681.52	$313,971.24	-8.1	100.0	100.0

All cooperating agencies, except the Government, expended less money on control work in 1925 than during the previous year. The Government also assumed a larger percentage (increase of 6%) of the total cost of control activities, while the cooperating state agencies correspondingly decreased their proportion of total expenditures.

3. Comparison of amount of State funds derived from various sources during 1924 and 1925:

Source of Funds	Percent of Total State Funds	
	1924	1925
State Appropriations	53.5	54.9
Town Appropriations	21.9	22.1
Individual Funds	20.9	21.7
Nursery Funds	.4	.4
All Other State Funds	3.3	.9

Although $35,977.16 less state money was expended from all sources in 1925 than during the previous year, yet the percent of the total state funds derived from state appropriations, town appropriations, and individual funds show slight increases of 1.4%, 0.2%, and 0.8% respectively. Due primarily to less money being spent on state land in Massachusetts during 1925, there was a decrease of $5429.56 (or 76.2%) in expenditures from "All Other State Funds". This caused a corresponding decrease of 2.4% in the proportionate part of total state funds derived from this source.

4. Comparison of percent of total state funds in each state derived from State Appropriation:

State	Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	Total
1924	17.6	26.8	24.3	49.9	63.1	85.2	84.6	53.5
1925	21.1	31.7	21.7	73.7	93.1	99.2	75.8	54.9

All States, except Vermont, Massachusetts and New York, expended more funds from state appropriations in 1925 than during

the preceding year. The largest decrease occurred in New York where $22,602.03 less state appropriation money was used, partially due to a $10,000.00 cut in the state appropriation. There was an increase during 1925 in the proportionate part of total expenditures derived from state appropriations in all states except Vermont and New York. Even though less state appropriation funds were used in Massachusetts during 1925, yet there was an increase of 23.8% over 1924 in the proportionate part of total state funds derived from this source. This is due to a decrease of $5972.89, or 51.8%, in individual funds expended.

5. Percent of total state funds in each state expended <u>from Town Appropriations</u>:

Year	Maine	N.H.	Vt.	Conn.	Total
1924	34.8	68.7	.8	1.4	21.9
1925	31.6	64.2	.9	0	22.1

During 1925, there was a decrease of $7650.83 in the amount of town money expended. Decreases also occur in the proportionate share of the total state funds used from town appropriations in Maine, New Hampshire and Connecticut. Yet, a slight increase (0.2%) is noted in the total proportionate part of all state funds expended from town appropriations. This is due to corresponding decreases in funds spent from other sources.

6. Percent of total state funds in each state expended <u>by Individual Cooperators</u>:

Year	Maine	N.H.	Vt.	Mass.	Conn.	N.Y.	Total
1924	45.5	4.5	74.9	32.0	13.4	15.4	20.9
1925	41.1	4.1	77.4	22.9	.8	24.2	21.7

(a) Individual cooperation decreased during 1925 in all states except Vermont and New York. The decrease of

$5972.89 in Massachusetts was due in part to the state scouts finding fewer areas that required crew work, and susequent cooperation with individuals. New York made commendable progress in securing a 16.4% increase in the amount of individual funds used in control work.

(b) The proportionate share of the total cost, in each state, expended by individuals, was decreased during 1925 in all states except Vermont and New York, where there were increases of 2.5% and 8.8% respectively. A slight increase of 0.8% is also noted in the proportionate part of total state funds expended by individual cooperators.

(c) Items 5 and 6 show that during 1925 in three states (Maine, New Hampshire and Vermont) the individual and town cooperators paid 43.8% of the entire state cost of the control work. In the other four Northeastern States, the state departments paid from 75.8% to 100.0% of the entire state costs. Conditions in these four states make a high state cost more or less necessary. In Rhode Island and Massachusetts, the high state cost is due to the state paying for the scouting and the relative scarcity of Ribes areas of sufficient size to require crew work, which in the case of Massachusetts would be paid by individuals. In New York, considerable control work is done on state land, also the overhead expenses are high. In Connecticut, the state policy has been to limit the amount of town and individual cooperation.

(d) Only three states (Maine, New Hampshire and Vermont) secured and expended town appropriations during 1925; 81.5% of these funds being used in New Hampshire. All states, except Rhode Island, had individual cooperation, the amounts varying from $80.00 in Connecticut to $14,520.35 in New York.

7. Only two states (Maine and Massachusetts) received money ($753.31) for blister rust control work from special nursery funds during 1925.

8. The money listed under heading "All Other Cooperative State Funds" was obtained in Maine, Massachusetts and Rhode Island. In Maine, $932.30 was expended for Lambert's salary and expenses. All the Massachusetts funds ($580.00) were used by the State Department of Conservation for control work on state forests. This is $5545.03 less than was expended in 1924. Due to a severe cut in the appropriation for this Department, it was necessary to curtail the amount of control

work. The Rhode Island money was a special expenditure for nursery inspection and scouting.

9. Total state funds expended during 1924 and 1925:

State	1924	1925	Percent Increase or Decrease Over 1924
Maine	$23,336.16	$22,765.09	-2.4
New Hampshire	57,747.96	51,580.59	-10.6
Vermont	9,878.18	10,509.13	+6.4
Massachusetts	36,007.41	24,260.72	-32.6
Rhode Island	2,753.36	2,683.17	-2.5
Connecticut	8,523.61	10,973.79	+28.7
New York	80,602.88	60,099.91	-25.4
TOTALS	$218,849.56	$182,872.40	-16.4

10. Federal $ for $ cooperative funds expended during 1924 and 1925:

State	1924	1925	Percent Increase or Decrease over 1924
Maine	$18,864.42	$19,349.10	+2.6
New Hampshire	32,720.87	34,386.75	+5.1
Vermont	11,984.46	11,126.30	-7.2
Massachusetts	22,847.22	25,012.97	+9.4
Rhode Island	4,309.71	1,471.04	-65.8
Connecticut	5,844.96	6,703.34	+14.7
New York	26,260.32	33,049.34	+25.9
TOTALS	$122,831.96	$131,098.84	+6.7

11. Percent of total state and federal funds, in each state, expended from federal $ for $ money:

State	Maine	N.H.	Vt.	Mass.	R.I.	Conn.	N.Y.	Total
1924	44.7	36.1	54.8	38.8	61.0	40.6	24.5	35.7
1925	45.9	40.0	51.4	50.8	35.4	37.9	35.5	41.7

(a) During 1925, federal funds were matched on a $ for $ basis by state expenditures in all states, except Vermont and Massachusetts. But, even these two states will adequately offset federal funds when considered on the basis of the fiscal year.

(b) The proportional part paid by the Government in each state varied during 1925 from 35.4% in Rhode Island to 51.4% in Vermont. The low percentage figure in Rhode Island is due to the state paying the salary and expenses of the Rhode Island agent during the period June to September 15th, inorder to balance federal expenditures for the fiscal year 1925.

(c) Item 10 shows there were increases in expenditures of federal funds during 1925 in all states, except Vermont and Rhode Island, where decreases occurred of 7.2% and 65.8% respectively. The increases in the other states ranged from 2.6% in Maine to 25.9% in New York. The Government expended $8266.88 (6.7%) more on $ for $ cooperative work in 1925 than during 1924.

STATE AND FEDERAL COOPERATIVE BLISTER RUST CONTROL EXPENDITURES, BY PROJECTS, IN NEW ENGLAND AND NEW YORK DURING THE CALENDAR YEAR 1925

Inorder to give a better general analysis of cooperative expenditures, by projects, the following summary lists comparative data for the years 1923 to 1925 inclusive.

Summary of Total Federal and State Expenditures by Projects

Year	1923	1924	1925
Total amt. Expended by all Cooperators	$314,295.98	$341,681.52	$313,971.24
Percent of total by projects:			
Ribes eradication	49.4	49.5	44.1
BRCA.A	34.9	33.2	37.6
Supervision	8.7	9.5	10.6
Inspection	-	2.8	2.8
Field Data	3.8	3.5	2.7
Miscellaneous	2.9	1.2	1.7
Ribes Compensation	.1	.1	.5

Summary of Total State Expenditures by Projects

Total Amt. Cooperative State Expenditures	$195,487.49	$218,849.56	$182,872.40
Percent of total by projects:			
Ribes eradication	78.1	75.5	74.6
Supervision	6.3	6.8	7.3
BRCA.A	4.5	5.8	5.2
Field Data	6.2	5.5	4.7
Inspection	-	4.2	4.5
Miscellaneous	4.6	1.9	2.8
Ribes Compensation	.2	.2	.9

Summary of Total Federal Expenditures by Projects

Total Amount Federal Expenditures	$118,808.49	$122,831.96	$131,098.84
Percent of total by projects:			
BRCA.A	84.9	82.1	82.8
Supervision	12.7	14.3	15.3
Ribes Scouting (Eradication)	2.4	3.2	1.6
Inspection (Checking)	-	.4	.3

Percent of Total Cost of Projects Paid By Government

Year	1923	1924	1925
BRCA.A.	92.0	88.8	91.9
Supervision	55.0	54.0	60.1
Ribes Scouting (Erad.)	1.8	2.4	1.5
Inspection (Checking)	-	4.6	4.5

STATE	Amount Paid by State	Amount Paid by Gov't.	Total Amount Paid	% Supervision Paid by		% Total State Expend. Paid for Super.	% Total Gov't. Expend. Paid for Super.	% of Total Expenditures (all projects) Paid for Super.
				State	Gov't.			
Maine	$1,510.01	$3,003.46	$4,513.47	33.4	66.6	6.7	15.5	10.7
N.H.	1,881.35	5,624.92	7,506.27	25.1	74.9	3.6	16.4	8.8
Vt.	440.85	2,425.41	2,866.26	15.4	84.6	4.3	21.8	13.3
Mass.	640.94	3,101.86	3,742.80	17.4	82.6	2.6	12.4	7.6
R.I.	371.26	469.10	840.36	44.2	55.8	13.9	31.9	20.2
Conn.	1,603.94	2,429.68	4,033.62	39.7	60.3	14.6	36.3	22.8
N.Y.	6,841.60	2,911.77	9,753.37	70.2	29.8	11.4	8.9	10.5
TOTALS	$13,289.95	$19,966.20	$33,256.15	39.9	60.1	7.3	15.3	10.6

	Notsivrtsc		Total		Manufactured Bird
	Yd Bird	Other	Amount		
2	1.03	6.63	15,125,423	34,500,5	
3	6.47	1.36	75,302,7	56,452,2	6
4	2.48	3.12	65,338,5	14,254,5	2
5	8.23	4.41	38,547,2	38,101,2	4
6	2.03	1.52	32,220,4	82,254,5	3
7	8.65	3.07	75,225,6	77,115,5	02
8	1.03	6.62	51,325,82	05,326,61	20

STATE AND FEDERAL EXPENDITURES ON PROJECT - "SUPERVISION"

Analysis

1. The expenditures made on this project were for salaries and expenses of all the state leaders (including York) and assistant leaders; also in New Hampshire, Vermont, Massachusetts and Connecticut, part of the wages of a clerk for time spent on blister rust control work are included. In Vermont, three quarters of Callward's time, from January to June 30th (when he resigned to become Extension Forester), and one third of Holden's time, from October first (when he became state leader) to December 31st, was charged to the

project - "Supervision". Riley received $25. per month federal pay from January to June 15th, which was charged to this project in Vermont. This project does not include the cost of the camp supervisors and eradication assistants in New York or the state checkers in New Hampshire and Connecticut. In Rhode Island, one third of Anderson's time was charged to "Supervision".

2. A total of $33,256.15, or 10.6% of the total cooperative expenditures, was used on supervision; the Government paying 60.1% of the costs and the State Departments 39.9%. Of the total Government expenditures, 15.3% was paid for supervision, while 7.3% of the total state funds were used on this project.

3. The percent of the cost of supervision paid by the State Departments ranged from 15.4% in Vermont to 70.2% in New York. The high supervisory charges against state funds in New York are due to the state paying York's salary and expenses, and Amadon's expenses.

4. For the total amount of money expended, the supervisory expenses are too high in Rhode Island and Connecticut, where 20.2% and 22.8% of the total cooperative expenditures were paid for supervision. The supervisory charges in New York, while only 10.5% of the total blister rust expenditures in that state, yet amounted to $9753.37 even without including clerical assistance at the Albany Office, eradication assistants, or camp supervisors.

5. Comparing total expenditures for supervision in the various states during 1925 with the previous year, increases are noted as follows: Maine (26.7%), Massachusetts (24.6%); and Connecticut (29.0%). Decreases occur in New Hampshire-(0.2%), Vermont (12.2%), and Rhode Island (13.9%).

STATE	Amount Paid by State	Amount Paid by Gov't.	Total Amount Paid	% Cost B.R.C. Agent Activities Paid by		% Total State Expenditures Paid for B.R.C. Agent Activities	% Total Gov't. Expenditures Paid for B.R.C. Agent Activities	% Total Expenditures (all projects) Paid for BRCAA
				State	Gov't.			
Maine	$2,512.16	$14,252.36	$16,764.52	14.9	85.1	11.0	73.7	39.8
N.H.	1,335.42	28,761.83	30,097.25	4.4	95.6	2.6	83.6	35.0
Vt.	466.92	8,700.89	9,167.81	5.1	94.9	4.5	78.2	42.4
Mass.	472.63	21,911.11	22,383.74	2.1	97.9	2.0	87.6	45.4
R.I.	783.87	1,001.94	1,785.81	43.8	56.2	29.2	68.1	43.0
Conn.	14.81	4,197.71	4,212.52	.3	99.7	.1	62.6	23.8
N.Y.	3,944.53	29,746.57	33,691.10	11.7	78.3	6.5	89.9	36.2
TOTALS	$9,530.34	108,572.41	118,102.75	8.1	91.9	5.2	82.8	37.6

	6.16	1.8	24.501	14.512.80
	8.84	4.11	01.169	42.941.85
	4.66	8.	52.515	14.161.4
	5.23	8.24	18.281	46.100.1
	6.76	1.5	47.282.55	11.116.15
	6.46	1.3	18.741.6	68.007.8
	3.56	4.4	25.760.02	58.157.85
	1.88	6.41	52.457.415	62.525.41

STATE AND FEDERAL COOPERATIVE EXPENDITURES ON PROJECT -
"BLISTER RUST CONTROL AGENT ACTIVITIES"

Analysis

1. The funds expended on the project - "Blister Rust Control Agent Activities" paid the salaries and expenses of the blister rust control agents and state men doing similar work. A small proportion was used for educational material. Special charges were made against this project in the various states as follows:

Vermont: One-third of Callward's time until June 30th, and two-thirds of Holden's time from October first to December 31st.

Rhode Island: Two-thirds of Anderson's time.

New York: Federal wages paid to Smith, Slocum, and Hinchman.

Maine: The cost of the temporary agents when employed on educational and service work.

2. A total of $118,102.75, or 37.6% of the total cooperative expenditures for all projects, was used on "Blister Rust Control Agent Activities"; the Government paying 91.9% of the total costs of this work, and the State Departments 8.1%.

3. The proportionate cost of "Blister Rust Control Agent Activities" paid by the State varied from 0.3% in Connecticut to 43.8% in Rhode Island. The high percentage figure in Rhode Island is due to the state paying the salary and expenses of the blister rust control agent for a period of four months inorder to offset federal expenditures during the previous fiscal year. The comparatively high share paid in Maine (14.9%) was due to the state paying the wages of a few scouts doing duties more or less similar to those of the blister rust control agents.

4. The percent of total state expenditures paid for "Blister Rust Control Agent Activities" ranged from 0.1% in Connecticut to 29.2% in Rhode Island. The high percentage figures in Rhode Island and Maine are again due to the respective reasons stated in the preceding paragraph.

5. The percent of the total expenditures (state and federal for all projects) paid for "Blister Rust Control Agent Activities" ranges from 23.8% in Connecticut to 45.4% in Massachusetts, and amounted to 37.6% when based on total expenditures in all states, compared with 33.2% during 1924. This increase is due to less money being spent on Ribes eradication and other projects during 1925, while the cost of maintaining the blister rust control agents increased due to raises in salaries and additional agents in Massachusetts and New York.

6. The expenditure of $118,102.75 for "Blister Rust Control Agent Activities" resulted in $80,071.37 being spent by individuals and towns on control work. (This is a decrease of $13,649.20, or 14.6%, over the previous year). In addition, the state appropriation funds of $100,352.25 are an indirect result of the agents' educational activities. There are, of course, many other valuable results obtained from the agents' work which cannot be measured in dollars and

cents; such as, greater public appreciation of forestry, especially the value, use, and protection of the farm woodlot.

Comparing total expenditures for "Blister Rust Control Agent Activities" in the various states during 1925 with the previous year, the following increases are noted: Massachusetts (6.7%), New Hampshire (6.7%), Maine (9.8%), Decreases occur in Vermont (0.6%), New York (0.6%), Connecticut (7.1%), and Rhode Island (12.9%).

STATE	Amount Paid by State	Amount Paid by Gov't.	Total Amount Paid	% of Ribes Erad. Paid by State	% of Ribes Erad. Paid by Gov't.	% Total State Expenditures Paid for Ribes Erad.	% Total Gov't. Expenditures Paid for Ribes Erad.	% of Total Expenditures (all projects) Paid for Ribes Eradication
Maine	$18,164.34	$2,093.28	$20,257.62	89.7	10.3	79.8	10.8	48.1
N.H.	44,636.57*	-	44,636.57*	100.0	-	86.5	-	51.9
Vt.	9,058.12	-	9,058.12	100.0	-	85.8	-	41.5
Mass.	21,759.45	-	21,759.45	100.0	-	89.7	-	44.2
R.I.	1,519.04	-	1,519.04	100.0	-	56.6	-	36.6
Conn.	5,419.35	75.95	5,495.30	98.6	1.4	49.4	1.1	31.1
N.Y.	35,787.36	-	35,787.36	100.0	-	59.6	-	38.4
TOTALS	$136,344.23	$2,169.23	138,513.46	98.5	1.5	74.6	1.6	44.1

*This amount is $21.60 greater than the figure listed for the total cost of Ribes eradication in New Hampshire in the previous eradication tables. This difference is due to special expenditures for trail paper, Ribes picks, paint, etc.

[illegible]	Amount Paid by Gov't.	Total Amount Paid	% of Items Pmtd. Paid by State	Gov't.
[illegible].34	92,093.28	420,267.62	89.7	10.3
[illegible].57*	–	44,625.57*	100.0	–
[illegible].12	–	9,058.12	100.0	–
[illegible]59.45	–	21,759.45	100.0	–
[illegible]19.04	–	1,519.04	100.0	–
[illegible]19.85	15.95	5,495.30	98.6	1.4
[illegible]27.56	–	35,757.56	100.0	–
[illegible]44.23	2,169.23	138,513.46	98.5	1.5

[illegible]ount is $21.60 greater than therefore listed for [illegible]ear in the previous appropriation table. This d[illegible]er, Tides picks, paint, etc.

STATE AND FEDERAL EXPENDITURES ON PROJECT - "RIBES ERADICATION"

Analysis

1. The cooperative funds used on the project - "Ribes Eradication" paid the wages of men employed in pulling Ribes, including owners' labor, state labor, linemen, scouts, foremen, and in New York, the cost of two camp supervisors. In New York and Connecticut, the cost includes board, lodging, and wages. The wages paid in these two states were correspondingly lower than in the other states.

2. A total of $138,513.46, or 44.1% of the total cooperative expenditures, was used on this project; the states and their cooperators paying 98.5% of the total costs of this work, and the Government 1.5%.

3. The federal expenditures paid the wages of temporary men in Maine used in advance scouting for Ribes, and for scout work done by agent Miles in Connecticut. This arrangement has been followed in Maine since the new control program started in 1922.

4. Of the total state expenditures, 74.6% was used on the project - "Ribes Eradication", while only 1.6% of the total federal funds were expended on this project.

5. The percent of the total state expenditures paid for "Ribes Eradication" ranged from 49.4% in Connecticut to 89.7% in Massachusetts. In Connecticut, Rhode Island, and New York, the State Departments and their cooperators expended only 49.4%, 56.6%, and 59.6%, respectively, of their total state funds on this project. This indicates a need for better allotment of state funds in these three states, inorder to apply more money directly to the eradication of Ribes. However, on the whole, there was a decrease of only 0.9% during 1925 in the percentage of the total state funds used on this project.

6. The percentage of the total expenditures (state and federal for all projects) used on "Ribes Eradication" ranged from 31.1% in Connecticut to 51.9% in New Hampshire; with a total for all states of 44.1%. In Connecticut, Rhode Island, and New York, only 31.1%, 36.6%, and 38.4% respectively, of the total state and federal funds were spent on this project. In fact, in all states, except New Hampshire, less than half of the total funds were used directly in eradicating Ribes. Compared with 1924, there was a decrease of 5.4% in the percentage of the total funds used on this project. In every state less money was expended on eradication work. Considering the control work in its entirety, it cost $1.13 to get another dollar effectively used in eradicating Ribes.

STATE EXPENDITURES ON PROJECT
"RIBES COMPENSATION"

STATE	Amount Paid by State	% Total State Expenditures Paid for Ribes Compensation	% Total State and Federal Expenditures (All Projects) Paid for Ribes Compensa.
Vermont	$32.50	.4	.2
Mass.	1387.70*	5.7	2.8
R.I.	9.00	.3	.2
N.Y.	240.57	.4	.2
TOTALS	$1669.77	.9	.5

*Only $377.10 paid for 1925 claims.

Analysis

1. No federal money was paid for compensation.

2. No compensation was paid for cultivated Ribes destroyed in Maine, New Hampshire, and Connecticut.

3. During 1925, a total of $1669.77, or 0.9% of the total state expenditures and 0.5% of the total state and federal funds used on all projects, was expended for Ribes compensation in four Northeastern States. Of this total amount, $1010.60 was paid for 1924 claims in Massachusetts. Therefore, only $659.17 was actually paid for cultivated bushes destroyed in 1925.

STATE	Amount Paid by State	Amount Paid by Gov't.	Total Amount Paid	% Inspection Paid by		% Total State Expenditures Paid for Inspection	% Total Gov't. Expenditures Paid for Inspection	% Total Expenditures (all projects) Paid for Inspection
				State	Gov't.			
Maine	$500.00	-	$500.00	100.0	-	2.2	-	1.2
N.H.	1707.23	-	1707.23	100.0	-	3.3	-	1.9
Conn.	475.06	-	475.06	100.0	-	4.4	-	2.7
N.Y.	5641.01	$391.00	6032.01	93.5	6.5	9.4	1.2	6.4
TOTALS	$8323.30	$391.00	$8714.30	95.5	4.5	4.5	.3	2.8

Inspection for Lot Number	Lot Size	Sample Size	Lot Inspected Fraction	Lot Inspected Amount	Lot Rejected Fraction	Lot Rejected Amount
1	100.00	100.0	1	100.00	1	100.00
2	100.00	100.0	1	52.1071	1	52.1071
3	100.00	100.0	1	50.5147	1	50.5147
4	100.00	100.0	1	10.5209	0.0	0.00
5	100.00	5.36	0.4	02.4128	2.4	02.4128

STATE AND FEDERAL EXPENDITURES ON PROJECT "INSPECTION"

Analysis

1. The states of Vermont, Massachusetts, and Rhode Island did not spend any money on the project "Inspection".

2. In Maine, the funds were used for inspection work in state nurseries; a special state appropriation being made for this work. The money in New Hampshire and New York was used respectively to employ three state checkers and five eradication assistants. Inorder to effectively conduct necessary control work, the Government temporarily paid the wages ($391.00) of these eradication assistants in New York during June. In Connecticut, the state expenditure was for the salary and expenses of Wilfong, who acted as a supervisor of eradication work.

3. A total of $8714.30, or 2.8% of the total state and federal expenditures for all projects, was used on the project "Inspection"; the State Departments paying 95.5% of the total costs and the Government the balance, or 4.5%.

STATE EXPENDITURES ON PROJECT - "FIELD DATA"

STATE	Amount Paid by State	% Total State Expenditures Paid for Field Data	% Total State and Federal Expenditures (All Projects) Paid for Field Data
Vermont	$400.00	3.9	1.9
N.H.	2009.28	3.9	2.3
Conn.	524.97	4.8	3.0
N.Y.	5621.65	9.2	6.1
TOTALS	$8555.90	4.7	2.7

Analysis

1. No federal money was expended on this project.

2. The expenditure of $2009.28 in New Hampshire was for the salaries and expenses of three state checkers who were used during the winter and spring months to assist the agents in field studies.

3. In Connecticut, the state expended $524.97 in conducting special studies on effectiveness of control, and size of crew.

4. The expenditure of $5621.65 in New York was for special field investigations conducted under the direction of Dr. York.

5. In Vermont, the $400.00 expenditure covers Assistant Forester Merrill's services on the white pine survey.

6. A total of $8555.90, or 4.7% of the total state expenditures, was used on the project "Field Data". In Connecticut, the Government furnished the services of Hodgkins and Endersbee to assist in the experimental work.

7. The time, spent by the blister rust control agents

of Vermont and Rhode Island on the white pine survey, is not charged to this project.

STATE EXPENDITURES ON PROJECT - "MISCELLANEOUS"

STATE	Amount Paid by State	% Total State Expenditures Paid for Miscellaneous	% Total State and Federal Expenditures (All Projects) Paid for Miscellaneous
Maine	$78.58	.3	.2
N.H.	10.74	.02	.01
Vermont	110.74	1.1	.6
Conn.	2935.66	26.7	16.6
N.Y.	2023.19	3.4	2.2
TOTALS	$5158.91	2.8	1.7

Analysis

1. No federal expenditures on this project.

2. No state money used on this project in Massachusetts and Rhode Island, and only $10.78 in New Hampshire.

3. During 1925, in five of the Northeastern States, a total of $5158.91, or 2.8% of the total state expenditures and 1.7% of the total state and federal funds used on all projects, was expended on the project "Miscellaneous".

4. The amounts used varied from $10.74 in New Hampshire to $2935.66 in Connecticut. In New York, $2023.19 was spent on this project, but this expenditure was only 3.4% of the total state funds used on all projects. On the other hand, the $2935.66 expended in Connecticut represented 26.7% of the total state expenditures. The miscellaneous funds in Connecticut were used chiefly for the purchase of an automobile.

SUMMARIES OF CONTROL WORK FOR ALL YEARS.

SUMMARY OF RIBES ERADICATION WORK IN THE NORTHEASTERN STATES
1917-1925

(By Years)

YEAR	Acres Eradicated	Ribes Destroyed		Total Cost	Per Acre Values	
		Wild	Cult.		Ribes	Cost
1917	262,562	861,353*	69,514	$65,481.24**	3.3	$.371
1918	137,458	2,413,887	22,150	99,388.20***	18.8	.72
1919	252,043	4,549,948	27,877	137,117.05	18.2	.54
1920	270,657	4,243,983	25,936	84,843.80	15.8	.31
1921	376,745	3,191,967	15,755	68,093.70	8.5	.18
1922	476,621	4,849,812	16,061	96,818.37	10.7	.20
1923	892,639	7,969,917	55,074	160,883.87	9.0	.18
1924	1,008,042	9,466,271	73,858	169,175.52	9.4	.167
1925	834,428	7,296,670	59,458	138,491.86	8.7	.166
TOTALS	4,511,195	44,843,808	365,683	$1,020,293.61	9.9	.226

*No Ribes figure for Connecticut in 1917
**No cost figure for Massachusetts in 1917
***No cost figure for Connecticut in 1918

NOTE: Conn./Acreage for 1917 omitted in obtaining per acre Ribes figure for 1917.
Mass. acreage for 1917 omitted in obtaining per acre cost figure for 1917.
Conn. acreage for 1918 omitted in obtaining per acre cost figure for 1918.

Summary does not include work done on White Mountain National Forest.

SUMMARY OF COOPERATIVE RIBES ERADICATION WORK
IN NORTHEASTERN AND LAKE STATES DURING 1917 - 1925

STATE	Acreage Eradicated	% Total Acreage Worked in Each State	Ribes Pulled		Total Cost	Per Acre Values	
			Wild	Cult.		Cost	Ribes
Maine	1,388,316	30.5	5,922,477	45,401	$94,533.31	$.068	4.3
N.H.	1,630,548	35.9	19,393,095	117,248	304,248.95	.186	11.9
Vt.	114,990	2.5	1,297,288	3,560	54,348.64	.473	11.3
Mass.	789,150	17.4	8,728,711	146,229	142,994.34*1	.203	11.1
R.I.	232,425	5.1	139,621	11,531	26,938.46	.116	.6
Conn.	70,728	1.6	1,112,928*2	3,387	33,098.78*3	.473	16.6
N.Y.	285,038	6.3	8,249,688	38,327	364,131.13	1.27	28.9
Wisc.	28,552	.6	2,035,838	19	17,915.91	.603	71.3
Minn.	5,942	.1	407,278*4	118	15,180.23	2.55	81.7
TOTALS	4,545,689	100.0	47,286,924	365,820	$1,053,389.75	.236	10.4

*1 - No cost figure available for Massachusetts in 1917
*2 - No Ribes figure available for Connecticut in 1917
*3 - No cost figure available for Connecticut in 1918
*4 - No Ribes figure available for Minnesota in 1917

NOTE: Acreage for 1917 omitted in obtaining per acre cost figure for Massachusetts.
" " 1917 " " " " " Ribes " " Connecticut
" " 1918 " " " " " cost " " "
" " 1917 " " " " " Ribes " " Minnesota.

Summary does not include work done on White Mountain National Forest.

SUMMARY OF COOPERATIVE RIBES ERADICATION WORK IN THE NORTHEASTERN AND LAKE STATES - PERIOD 1918-1925 Inc.

(By States)

STATE	Acreage Worked	% Total Acreage Worked in Each State	No. Ribes Pulled		Total Cost	Per Acre Values	
			Wild	Cult.		Cost	Ribes
Maine	1,383,196	32.3	5,874,270	44,002	$90,405.31	$.065	4.2
N.H.	1,607,457	37.5	18,930,595	116,748	294,550.73	.183	11.8
Vt.	108,990	2.6	1,252,610	3,560	47,239.32	.433	11.5
Mass.	703,087	16.4	8,546,140	99,987	142,994.34	.203	12.1
R.I.	224,189	5.2	136,986	10,728	24,318.56	.108	.61
Conn.	67,028	1.6	1,112,928	3,387	29,953.78*	.452	16.6
N.Y.	154,686	3.6	8,128,926	17,757	325,350.33	2.10	52.5
Wisc.	28,299	.7	1,997,838	19	17,139.98	.605	70.5
Minn.	4,981	.1	407,278	118	14,180.17	2.847	81.7
TOTALS	4,281,913	100.0	46,387,571	296,306	$986,132.52	.230	10.8

*No cost figure available for 800 acres eradicated in Connecticut during 1918. Connecticut acreage for 1918 (800 acres) omitted in obtaining per acre cost for 1918, and in grand total cost figures.

Summary does not include the following eradication work done by the Forest Service in the White Mountain National Forest:

Year	Acreage Eradicated	Ribes Pulled	Cost
1924	4944	151,489	?
1925	466	49,479	$284.41

SUMMARY OF COOPERATIVE RIBES ERADICATION WORK IN THE NORTHEASTERN AND LAKE STATES - PERIOD 1918-1925 Inc.

(By Years)

YEAR	Acreage Worked	% Total Acreage Worked Each Year	Wild Ribes Pulled	Cult. Ribes Pulled	Total Cost	Cost Per Acre	Ribes Per Acre
1918	138,938	3.2	2,532,087	22,150	$102,888.20*	$.74	18.2
1919	254,503	5.9	4,708,252	27,877	142,743.71	.56	18.5
1920	282,329	6.5	5,139,843	26,054	96,985.27	.34	18.2
1921	386,221	9.2	3,688,814	15,774	72,440.10	.187	9.5
1922	481,466	11.2	5,381,674	16,061	99,852.01	.20	11.2
1923	895,986	20.9	8,173,960	55,074	163,555.85	.182	9.1
1924	1,008,042	23.5	9,466,271	73,858	169,175.52	.167	9.4
1925	834,428	19.6	7,296,670	59,458	138,491.86	.166	8.7
TOTALS	4,281,913	100.0	46,387,571	296,306	$986,132.52	.230	10.8

*No cost figure available for 800 acres eradicated in Connecticut during 1918. Connecticut acreage for 1918 (800 acres) omitted in obtaining per acre cost for 1918, and in grand total cost figure.

Summary does not include work on White Mountain National Forest.

BLISTER RUST CONTROL WORK IN THE NORTHEASTERN STATES

RIBES ERADICATION SUMMARY 1918 – 1925

STATE	YEAR - 1918						YEAR - 1919					
	ACRES	NO. RIBES		TOTAL COST	Per Acre		ACRES	NO. RIBES		TOTAL COST	Per Acre	
		Wild	Cult		Cost	Ribes		Wild	Cult.		Cost	Ribes
MAINE	4910	91,862	235	5179.23	1.05	18.7	9216	333,775	0	6136.10	.666	36.2
N. H.	66,292	959,315	8427	26,013.89	.39	14.47	163,413	1,659,936	21,171	32,988.35	.20	10.15
VT.	4698	78,563	77	5182.64	1.10	16.8	2460	96,749	0	2214.26	.90	39.3
MASS.	18,706	336,067	1919	15,805.31	.84	19.03	10,849	201,882	2374	8136.18	.75	18.6
R. I.	12,715	13,927	492	3527.97	.28	1.09	40,411	45,320	1637	5609.74	.14	1.12
CONN.	800	10,000	0	Private Funds	–	12.5	2500	31,000	0	2323.34	.93	12.4
N. Y.	29,337	904,133	11,000	43,679.16	1.48	30.81	23,194	2,181,286	2675	79,689.08	3.43	94.04
TOTALS	137,458	2,413,887	22,150	99,388.20	.72	18.8	252,043	4,549,948	27,877	137,117.05	.54	18.2

STATE	YEAR - 1920						YEAR - 1921					
	ACRES	NO. RIBES		TOTAL COST	Per Acre		ACRES	NO. RIBES		TOTAL COST	Per Acre	
		Wild	Cult.		Cost	Ribes		Wild	Cult.		Cost	Ribes
MAINE	10,283	176,788	636	4994.05	.486	17.19	156,221	56,304	708	3398.76	.022	.36
N. H.	204,093	2,061,996	22,206	35,864.48	.175	10.1	137,827	1,654,443	9713	21,873.07	.159	12.0
VT.	4501	36,294	74	3391.60	.75	8.06	6319	60,537	131	3464.01	.548	9.58
MASS.	19,389	1,224,306	1421	10,422.87	.54	63.14	32,933	632,618	4631	10,290.54	.313	19.2
R. I.	23,164	5973	1550	3796.92	.16	.26	26,971	16,022	552	3826.92	.142	.59
CONN.	2170	42,793	2	1974.70	.91	19.72	8000	41,470	6	2664.07	.33	5.18
N. Y.	7057	693,833	47	24,399.18	3.46	98.6	8474	730,573	14	22,576.33	2.66	86.3
TOTALS	270,657	4,243,983	25,936	84,843.80	.31	15.8	376,745	3,191,967	15,755	68,093.70	.18	8.5

STATE	YEAR - 1922					
	ACRES	NO. RIBES		TOTAL COST	Per Acre	
		Wild	Cult.		Cost	Ribes
MAINE	190,209	449,287	3688	8012.48	.042	2.3
N. H.	179,893	1,816,829	9061	28,706.64	.159	10.0
VT.	13,512	201,906	812	6150.24	.455	15.0
MASS.	64,302	1,578,294	2368	13,375.09	.208	24.5
R. I.	11,500	11,764	132	1840.00	.16	1.02
CONN.	6175	137,501	0	4651.50	.753	22.2
N. Y.	11,030	654,231	0	34,082.42	3.09	59.3
TOTALS	476,621	4,849,812	16,061	96,818.37	.20	10.7

STATE	YEAR - 1923						YEAR - 1924					
	ACRES	NO. RIBES		TOTAL COST	Per Acre		ACRES	NO. RIBES		TOTAL COST	Per Acre	
		Wild	Cult.		Cost	Ribes		Wild	Cult.		Cost	Ribes
MAINE	336,452	1,209,282	12,095	19,333.16	.057	3.6	401,227	1,846,957	11,399	23,093.91	.057	5.0
N. H.	268,237	3,496,733	24,779	51,651.48	.192	13.3	326,438	4,037,011	14,989	32,837.85	.165	12.4
VT.	25,190	278,570	1234	8498.43	.337	11.0	25,688	182,154	592	9280.02	.361	7.1
MASS.	201,931	1,776,107	14,887	28,411.92	.14	7.8	159,776	2,023,036	38,777	34,772.98	.217	12.6
R. I.	31,308	14,275	1464	1895.96	.06	0.45	52,480	24,711	2933	2302.01	.044	0.5
CONN.	14,062	288,333	248	6863.14	.488	20.5	17,215	289,034	2447	5981.73	.347	16.7
N. Y.	15,459	906,617	367	44,229.78	2.87	57.3	25,198	1,061,368	2501	40,907.02	1.62	42.1
TOTALS	892,639	7,969,917	55,074	160,883.87	.18	9.0	1,008,042	9,466,271	73,858	169,175.52	.167	9.4

STATE	YEAR - 1925						TOTALS 1918–1925					
	ACRES	NO. RIBES		TOTAL COST	Per Acre		ACRES	NO. RIBES		TOTAL COST	PER ACRE	
		Wild	Cult.		Cost	Ribes		WILD	CULT.		Cost	Ribes
MAINE	274,678	1,710,015	13,041	20,257.62	.073	6.2	1,383,196	5,874,270	44,002	90,405.31	.065	4.2
N. H.	261,244	3,244,332	6402	44,614.97	.170	12.4	1,607,457	18,930,595	116,748	294,550.73	.183	11.8
VT.	26,622	317,837	640	9038.12	.340	11.9	108,990	1,252,610	3560	47,239.32	.433	11.5
MASS.	195,201	751,830	33,610	21,759.45	.111	3.8	703,087	8,546,140	99,987	142,994.34	.203	12.1
R. I.	25,640	4994	1928	1519.04	.059	0.1	224,189	136,986	10,728	24,318.56	.108	0.61
CONN.	16,106	272,797	684	5495.30	.341	16.9	67,028	1,112,928	3387	29,953.78	.452	16.6
N. Y.	34,937	994,865	1153	35,787.36	1.024	28.4	154,686	8,128,926	17,757	325,350.33	2.10	52.5
TOTALS	834,428	7,296,670	59,458	138,491.86	.166	8.7	4,248,633	43,982,455	296,169	954,812.37	.225	10.3

Note: Summary does not include work on White Mountain National Forest in 1924 and 1925.

K K. Stimson
Boston, Mass. – 3/25/26

SUMMARY OF TOWN AND INDIVIDUAL COOPERATION
IN NORTHEASTERN STATES DURING PERIOD - 1917-1925

Year	No. Individual Cooperators		Amount Spent by Individual Cooperators	No. Towns Appropriating	Amount Appropriated
	Cult. Ribes Erad. Only	Wild & Cult. Ribes Erad.			
1917	-	5	$42.86	-	-
1918	-	16	6133.45	43	$7,200.00
1919	-	55	11,960.56	38	6,310.00
1920	-	168	9,650.14	51	8,500.00
1921	-	142	12,852.07	34	5,550.00
1922	-	971	26,512.49	59	19,827.86
1923	698	1968	40,969.47	122	36,380.00
1924	1714	3059	45,698.43	147	47,352.81
1925	958	3069	39,720.06	132	40,989.90
TOTALS	3370	9453	$193,539.53	626	$172,110.57

Summary of Town and Individual Cooperation in

Blister Rust Control Work in MAINE

1917 - 1925

Year	No. Individual Cooperators		Amount Spent by Individual Cooperators	No. Towns Appropriating	Amount Appropriated
	Cult. Ribes Erad. Only	Wild & Cult. Ribes Erad.			
1917-1920	-	-	-	-	-
1921	-	30	$1,163.07	-	-
1922	-	464	4,409.32	8	$1,300.00
1923	58	1090	8,760.34	39	7,115.00
1924	94	1607	10,619.58	49	8,154.25
1925	47	1548	9,337.30	51	8,000.00
TOTALS	199	4739	$34,289.61	147	$24,569.25

Summary of Town and Individual Cooperation in

Blister Rust Control Work in NEW HAMPSHIRE

1917 - 1925

Year	No. Individual Cooperators		Amount Spent by Individual Cooperators	No. Towns Appropriating	Amount Appropriated
	Cult. Ribes Erad. Only	Wild & Cult. Ribes Erad.			
1917	-	5	$42.86	-	-
1918	-	8	810.95	43	$7,200.00
1919	-	34	2,053.65	38	6,310.00
1920	-	97	4,764.37	50	8,000.00
1921	-	23	2,688.51	31	4,350.00
1922	-	148	9,398.09	49	16,800.00
1923	-	121	7,635.45	82	28,765.00
1924	-	46	2,582.27	96	38,975.00
1925	-	30	2,090.76	78	32,725.00
TOTALS	-	512	$32,066.91	467	$143,125.00

Summary of Town and Individual Cooperation in

Blister Rust Control Work in Vermont

1917 - 1925

Year	No. Individual Cooperators		Amount Spent by Individual Cooperators	No. Towns Approp-riating	Amount Appropriated
	Cult. Ribes Erad. Only	Wild & Cult. Ribes Erad.			
1917-1918	-	-		-	-
1919	-	1	$270.00	-	-
1920	-	29	515.61	-	-
1921	-	31	3,235.50	-	-
1922	-	125	5,502.22	-	-
1923	3	220	7,247.34	-	-
1924	27	246	7,392.74	1	$100.00
1925	38	258	8,137.50	3	264.90
TOTALS	68	910	32,300.91	4	$364.90

Summary of Town and Individual Cooperation in

Blister Rust Control Work in Massachusetts

1917 - 1925

Year	No. Individual Cooperators		Amount Spent by Individual Cooperators	No. Towns Appropriating	Amount Appropriated
	Cult. Ribes Erad. Only	Wild & Cult. Ribes Erad.			
1917-1918	-	-	-	-	-
1919	-	15	$1,575.00	-	-
1920	-	31	1,877.22	1	$500.00
1921	-	35	2,434.00	3	1200.00
1922	-	194	3,222.67	-	-
1923	586	470	6,894.90	-	-
1924	1564	980	11,527.04	-	-
1925	873	890	5,554.15	-	-
TOTALS	3023	2615	$33,084.98	4	$1700.00

Summary of Individual Cooperation in Blister

Rust Control Work in RHODE ISLAND

1917 - 1925

Year	No. Individual cooperators		Amount Spent by Individual Cooperators
	Cult. Ribes Erad. Only	Wild & Cult. Ribes Erad.	
1917	-	-	-
1918	-	6	$550.00
1919	-	-	-
1920	-	-	-
1921	-	-	-
1922	-	-	-
1923	34	1	15.36
1924	-	1	16.00
1925	-	-	-
TOTALS	34	8	$581.36

Summary of Town and Individual Cooperation in

Blister Rust Control Work in CONNECTICUT

1917 - 1925

Year	No. Individual Cooperators		Amount Spent by Individual Cooperators	No. Towns Appropriating	Amount Appropriated
	Cult. Ribes Erad. only	Wild & Cult. Ribes Erad.			
1917-1921	-	-	-	-	-
1922	-	2	$760.29	2	$1727.86
1923	17	9	867.45	1	500.00
1924	29	18	1139.51	1	123.56
1925	-	23	80.00	-	-
TOTALS	46	52	$2847.25	4	$2351.42

Summary of Individual Cooperation in

Blister Rust Control Work in NEW YORK

1917 - 1925

Year	No. Individual Cooperators		Amount Spent by Individual Cooperators
	Cult. Ribes Erad. only	Wild & Cult. Ribes Erad.	
1917	-	-	-
1918	-	2	$4,772.50
1919	-	5	8,061.91
1920	-	11	2,492.94
1921	-	23	3,330.99
1922	-	38	3,219.90
1923	-	57	9,548.63
1924	-	161	12,421.29
1925	-	320	14,520.35
TOTALS	-	617	$58,368.51

COMMENTS ON RECOMMENDATIONS SUBMITTED BY STATE LEADERS IN THEIR ANNUAL STATE REPORTS FOR 1925.

Maine:

R. New territory should be added to agents' districts, especially Kimball's.

C. There is still more than sufficient unworked territory in each of the present districts to keep the agents busy during 1926, provided the towns make appropriations. However, to assure an adequate amount of town funds during 1926, the towns in the western part of Kennebec County should be urged to appropriate in addition to those unworked towns in the present agent districts.

R. Pine owners should be aided in towns which have not appropriated.

C. Make strenuous effort, by educational and service means, to get unworked towns to appropriate. If they still do not subscribe to the work, let them go until towards the end of the campaign, then make another final effort. If no local town funds are then appropriated, place a scout-foreman in the town at state expense inorder to eliminate the non-Ribes areas and to supervise the eradication work done by individuals. The extra expense to the state would amount to about $200. yearly for each town worked on this basis.

Additional comments on points mentioned in Maine report;

P. Not all eradication jobs checked.

C. Inorder to insure good results, it is desirable that each job be supervised by a town foreman. Any unsupervised work by individuals should be thoroughly checked. Also, a sufficient number of administrative checks should be made of the supervised work and of the scout work done by the temporary agents to guarantee effective results.

P. Blister rust control agent was unable to do anything to offset or repay Farm Bureau for stenographic service furnished.

C. Every agent ought to be able to more than offset such assistance by personal service he renders the Farm Bureau. One way is to refer requests for information on farming to the Farm Bureau, using a special card for this purpose.

P. Maine Ribes eradication law had to be enforced twice in 1924 and four times in 1925.

C. This shows good cooperation and real results.

New Hampshire:

R. Would like to have Office of Blister Rust Control secure services of Mr. A. B. Graham to give talk to New Hampshire agents.

C. Think this is a good idea - also suggest similar talk to Massachusetts agents.

R. New tag - reading on one side (Blister Rust Kills White Pine), on other side statement regarding control methods.

C. I do not favor this idea, because I doubt the value of using tags promiscously. When possible, a definite area should be tagged rather than just one or two trees. Cardboard signs explaining control measures are now available. One or two of these conspicuous signs at a roadside demonstration should be more effective than small tags (stating the control measures) fastened to infected pines.

R. More contact is needed with rural schools.

C. Yes - especially during winter months when many other phases of the work are difficult or impossible.

R. Small group demonstrations are more effective than field meetings.

C. Yes, believe we should emphasize the group demonstration rather than the field meeting which is too expensive for results obtained.

Rhode Island:

Recommendations -

1. During 1926, work area in towns of Glocester, Burrillville, Smithfield, and North Smithfield directly east of the section covered in 1925, completing initial eradication of Ribes in white pine district of state.

2. Conduct general educational work and a house to house canvas of owners in 1926 area, informing them of the disease and getting their general cooperation in control work.

3. Place one of the scouts in charge of the other men.

Comment -

Agree with these routine recommendations.

Connecticut:

No recommendations made. The tentative plans as outlined for the 1926 work appear to be satisfactory, namely; (1) the preparation of a definite policy and plan of work covering all phases of the control program, (2) agents spend more time on interviewing, (3) keeping of definite card record of all interviews, (4) training camp for foremen, definite system of checking and employment of state checker, (5) careful study of records and better adaption of these to Connecticut work, and (6) secure additional field data on crew efficiency experiment.

Massachusetts:

R. Assign Hodgkins to permanently work in Massachusetts under state leader's direction.

C. No. The state will have difficulty in meeting federal expenditures on a dollar for dollar basis according to present arrangements, without adding to this burden. It would be unfair to the other states, not to charge Hodgkins' time on a $ for $ basis if he worked permanently in Massachusetts. If the state should employ Hodgkins, it would take too large a percentage of state funds for overhead expenses, and leave too little for necessary scouts and foremen. Hodgkins is also needed on such federal projects as quarantine inspection, field studies, etc. The best we could possibly do for Massachusetts in this respect is to loan Hodgkins for short temporary periods when it does not interfere with his federal activities.

R. Issue "Blister Rust News" quarterly instead of monthly and limit articles chiefly to those which will aid agents in their work.

C. This recommendation needs careful consideration. The state numbers of the news letter have already been overdone. The comparatively few men who furnish news are finding it rather a bore to continually supply such information. The solution may be in publishing the news letter less frequently. I am in favor of a bi-monthly issue rather than quarterly. It may be advisable to send out a questionaire to the field men to find out just what they do want in a news letter.

R. Discontinue sending monthly analysis report to states.

C. Apparently the only serious objection against this report was the tables which summarized the work by states. The majority of the leaders favor a continuation of this report. We will, therefore, continue to send copies of this report to the states, but the objectionable features in the summaries will be eliminated.

R. Examination be made of shipments of nursery stock destined to towns in control areas - also a check be made of sales of Ribes by Massachusetts nurseymen.

C. This is entirely a state matter which should be handled by the State Nursery Inspector. I believe the recommendations are well taken.

R. Extension Service be urged not to feature the home manufacture of Ribes' products.

C. I am in sympathy with this recommendation, but so far the state leader has not shown any specific instances where the Extension Service has featured such products. Until this is done, I do not see how our office can take any action in the matter.

R. A definite policy should be developed regarding re-eradication of Ribes.

C. Each state should work out its own policy in this respect and submit it to the Office of Blister Rust Control for approval.

R. Federal credit be given on a dollar for dollar basis for value of cultivated Ribes destroyed in Mass.

C. Any action taken on this matter will establish a precedent, consequently careful thought should be given to this problem. At the present time, the Government is some cases offsets, on a dollar for dollar basis, the value of time spent by individuals in eradicating Ribes, provided the work is checked and approved by state men. The question arises, if the time used in pulling the bushes is a fair dollar for dollar charge, is not the value of the cultivated Ribes also a fair charge, provided a standard scale is used for valuing the bushes? These pulled Ribes represent a definite loss to the individual and in giving the bushes to the state, he gives the equivalent of a certain amount of money just as much as he does in giving time to pull the bushes. Although there may be some justice to this claim, I do not favor it except in an extreme case where a state is unable to meet federal money on a dollar for dollar basis. Even under such conditions, it may be too easy a way of meeting federal money rather than applying greater efforts to get increased cooperation in eradicating Ribes.

R. Increase mileage rate from 7 to 9 cents.

C. I am convinced from personal experience that the average agent is losing money in operating his car at 7 cents per mile. It may be possible to about break even with a Ford car, but I do not think it can be done with a higher priced automobile. Most of the agents are operating medium priced cars rather than Fords, consequently they are losing money. But, as the work can be done about as effectively with a Ford as with a higher priced automobile, I can see no legitimate reason for asking the Government to increase the 7 cent rate until it is proved a serviceable car, such as a Ford, cannot be operated for 7 cents a mile and effectively used in our work.

R. Revision of records to get better corrilation.

C. A revised interview and record card has already been prepared for use in Massachusetts. This new card combines the regular interview card with the state form No. 44. No other changes in the records appear advisable, except to simplify the yearly BRE3a form.

R. Checking needs to be better organized and a state checker used on this work.

C. The state leader, with the agents, should develop definite plans for checking. If sufficient state funds are available to employ a qualified checker, such an employee could be very effectively used. It is doubtful if the state has enough money to do this and at the same time hire sufficient scouts and foremen. It will probably be necessary to develop some plan whereby the checking is done by the agents and the scouts.

R. More frequent conferences of the agents are needed.

C. Believe these are well worthwhile. Meetings are especially needed before eradication season and prior to starting the winter program. The state leaders should notify the federal supervisor of such meetings so he can pass on to them in advance

any ideas he thinks might be helpful and which could best be discussed by the field men at such a get-to-gether.

R. A representative from the Washington Office should visit all the Massachusetts agents.

C. Suggest either Martin or Pierce make such a trip.

R. Develop more compact type of window exhibit.

C. Suggest Pierce work on this problem, getting the agents' ideas as a basis for improving the exhibit.

R. Prosecute persons planting Ribes on property after cultivated bushes have been eradicated.

C. Am in favor of such action. The Massachusetts State Nursery Inspector is the one to force such prosecution.

R. Prohibit sale of Ribes except after examination of location where it is desired to plant.

C. This would be a very expensive proposition; the other recommendations made regarding cultivated Ribes appear to be more practicable.

Additional Comments on Points Mentioned in Massachusetts Report

1. The purchasing of pine from Massachusetts nurseries is still somewhat dangerous as infected trees were found in some nurseries during 1925. However, if the Ribes are removed from each area to be planted and a 900-foot protection strip, no serious loss will develop. The state is to be commended in eradicating all black currants within one mile of the important pine growing commercial nurseries and nurseries operated by the Massachusetts Department of Conservation.

2. I agree with Perry in advocating greater use of local exhibits in towns rather than expensive ones at fairs. However,

some fair exhibits are necessary even if definite results are not received. Such exhibits help to pave the way for intensive service work and arouse a general interest in the work.

3. I am not so sure the educational program has advanced far ahead of control work in Massachusetts as mentioned by Perry. The agents in this state have always rated low in educational work. During the year, two of the Massachusetts agents did not place any exhibits, and one of these men did not have any talks at meetings during the first ten months of the year. It is noted this agent rated lowest in individual cooperation, obtaining only 881 acres of such work. Service work is most important without doubt and should be pushed to the utmost, but general educational activities must have a definite place in the program.

4. The new form letter sent to each individual cooperator in Massachusetts is an idea which can well be adopted in the other states. This letter summarizes the work done on each cooperator's land and urges his further cooperation in destroying any re-growth of Ribes.

VERMONT

1. Agents should spend more time on supervision and checking - less on travel and office.

2. All details of eradication jobs should be completed at once, such as marking boundaries in red paint, locating area on map, numbering area, and listing owner's name and address on back of map corresponding to numbered area.

3. State allotment for fiscal year 1927 - $3,000.

4. Continue present policy of asking individuals to pay all expenses except supervision.

5. Agents should endeavor to secure more town cooperation.

Comment - Heartily agree with these good recommendations.